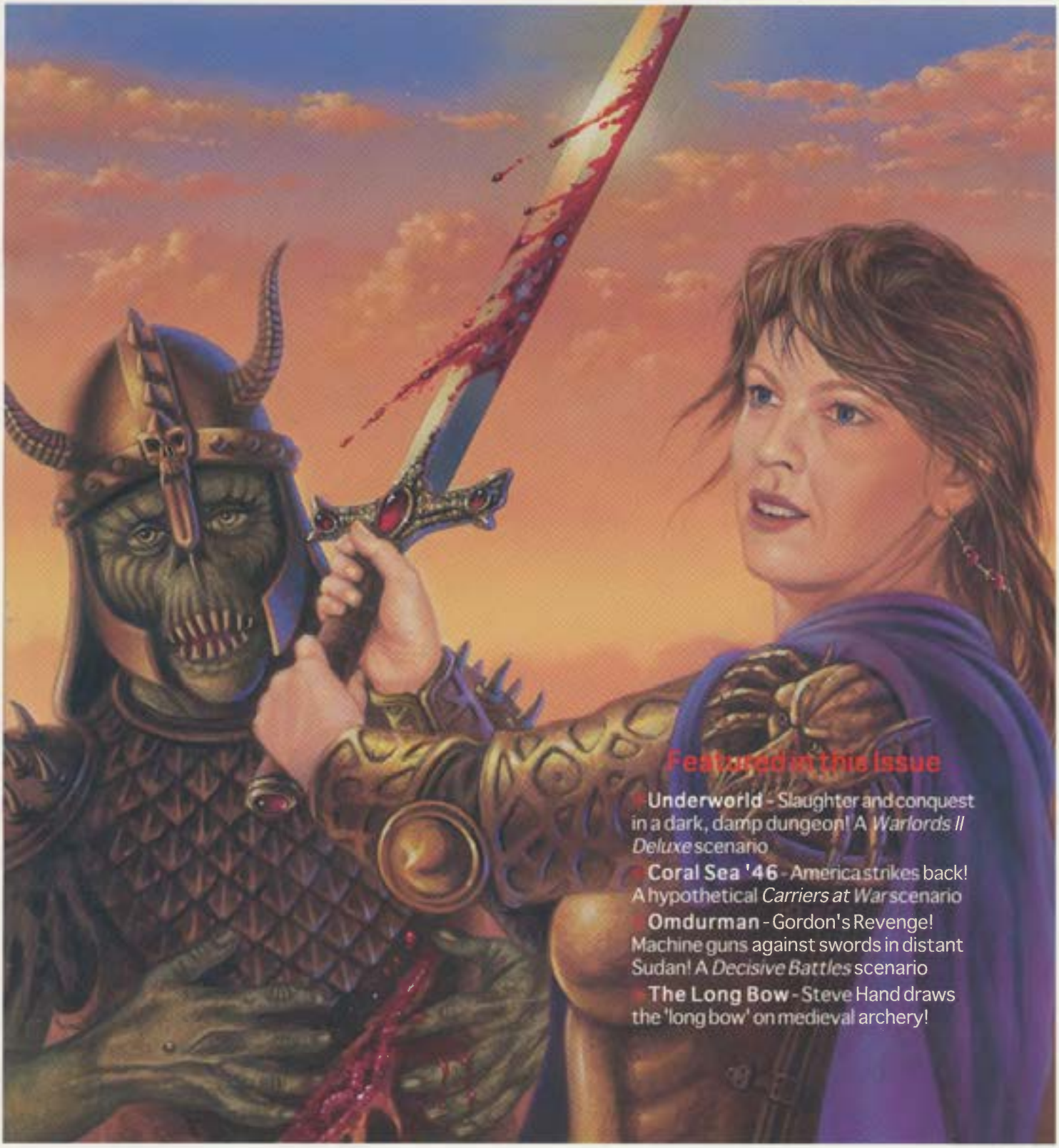
run 5

THE JOURNAL OF STRATEGIC STUDIES GROUP

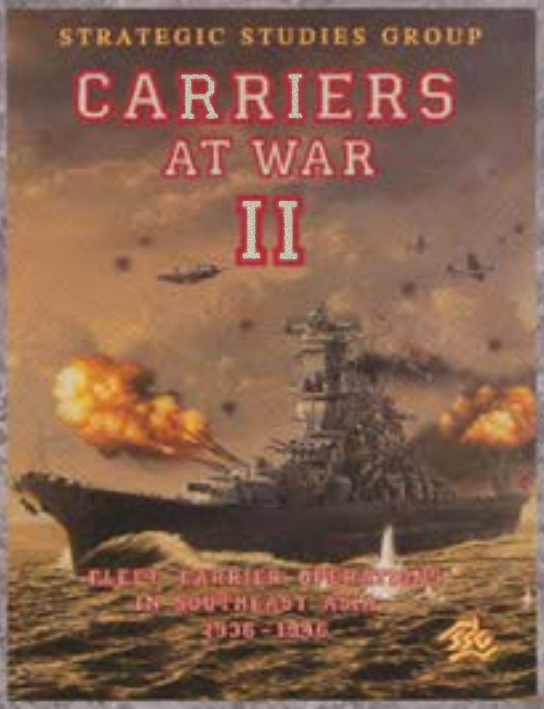
Issue 24

AUST $5.00/US $5.00/UK £2.50



Featured in this Issue

- **Underworld** - Slaughter and conquest in a dark, damp dungeon! A *Warlords II Deluxe* scenario
- **Coral Sea '46** - America strikes back! A hypothetical *Carriers at War* scenario
- **Omdurman** - Gordon's Revenge! Machine guns against swords in distant Sudan! A *Decisive Battles* scenario
- **The Long Bow** - Steve Hand draws the 'long bow' on medieval archery!



CARRIERS AT WAR II

Carriers at War II provides more tension, more excitement and tougher opponents in more great naval battles from World War II.

The cat-and-mouse nature of air-naval warfare is vividly recreated where entire battles can turn on the achievement of a single plane. The eight brand new scenarios in *Carriers at War II*, some hypothetical, others controversial, explore all the fascinating options available to the carrier forces of the United States, Great Britain and Japan.

Carriers at War II uses an improved version of the original *Carriers at War* game system to recreate carrier warfare from its earliest days to the final, climactic assault on the Japanese mainland, made under the cloud of constant Kamikaze attack!

- An even better WarRoom motivates the meanest computer opponents in the computer gaming world!
- Option to split off damaged ships!
- Weather, up-dated every hour, can now be displayed on screen at all times.
- Scenarios included are *Plan Orange*, *Force Z*, *Java Sea*, *Tenkosho*, *Port Darwin*, *Leyte Gulf*, *Okinawa* and *Operation Olympic*.
- Exciting variants for all scenarios investigate the varied options open to the antagonists!
- Completely compatible with the original *Carriers at War* and the *Carriers at War Construction Kit*.

Screen shots are from the IBM version

To purchase *Carriers at War II*, visit your local retailer or call SSG Inc on 904- 469-8880 (fax 904-469-8885) in North America or call SSG P/L (Australia) on 02-819-7199 (fax 02-819-7737) if you live anywhere else.

Run 5

Issue 24

Editor's Chance
Notes, Work in Progress. . . 2

Book of the Quarter
The Desert Generals 3
Monty Gets it in the Neck Again

The Q Store
Have a Look at our Special Offers. . . 4

Letters
Tell Us What You Think 4

The Supremacy of the Longbow
A Military Myth 5

Omdurman
The Downfall of Mahdism 19

Snippets of Military History 46

Editor
Stephen Hand
Editor Emeritus
Ian Trout
Contributing Editors
Roger Keating
Gary Makin
Gregor Whiley
Steve Fawkner
Brett Harrison
U.S. Operations
John Gleason
Illustrator
Nick Stathopoulos
Mentor
Ken Trout
Colour Artwork
John Mockridge
Graphus Pty Limited
Printing
Pirie Printers

Run 5 is published 4 times per year by Strategic Studies Group Pty Limited. All Rights Reserved. © SSG 1995.

Australian Office
P.O. Box 261, Drummoyne, NSW. 2047. Tel (02) 819-7199. Fax (02) 819-7737.

American Office
P.O. Box 30085, Pensacola, FL. 32503-1085. Tel (904) 469-8880. Fax (904) 469-8885.

ISSN 0816-7125

Online Addresses
Compuserve: Strategic Studies Group-72040,34
Applelink: Strategic Studies Group-AUST0161
GEnie: SSG

Disk Subscriptions

Disk subscriptions are now available for IBM and Macintosh users. The cost is the same for all formats.

IBM users must tell us whether they prefer 3.5" or 5.25" format. If you don't specify a format, you will receive the 3.5" diskette. If you wish to switch disk subscriptions from one machine format to another, just let us know.

How to Install Your Scenarios

IBM

Omdurman: Copy the Omdurman files to the DB directory

Coral Sea 1946: Copy the Coral Sea 1946 files into the scenario subdirectory of the CAW or CAWII directory

Underworld: From the W2Deluxe directory type Install <enter>, click on 'Librarian', then click on 'source'.click on the appropriate drive (usually A:) then click on the icon 'Under.scz', click on unpack and when the scenario has unpacked click okay, done and exit as prompted.

MAC

Omdurman: Copy the colour or B&W Omdurman scenario (as appropriate) into your DB folder.

Stalingrad: Copy the colour or B&W Stalingrad scenario (as appropriate) into your Rommel, Panzer Battles, Halls of Montezuma or MacArthur's War folder.

Coral Sea 1946: Copy the Coral Sea 1946 files into your Carriers at War folder

EDITOR'S CHANCE

Run 5 continues to look different with every issue. Gone are the days of two articles and a gaggle of data with which the scenarios could be created. This is the first issue for years not to include a scenario for the *Battlefront Game System* (although Macintosh disk subscribers receive the Operation Uranus scenario). In its place is an article discussing the history and effectiveness of the longbow and the reasons for its eventual replacement by the hand-held firearm. This is a subject near to my heart.

As the proud owner of a matchlock arquebus it constantly annoys me to hear people claim that the early guns were ineffective. One simply has to fire a matchlock to realise the horrifying efficiency of even these embryonic guns. I have seen some fearful drivel in both books and magazines which serves only to highlight the unfamiliarity of the writers with the weapons they are describing. Then, as today, governments did not spend a huge proportion of their income reducing the effectiveness of their military.

On another note, regular attendees of the *Origins* Convention will have noted our absence this year. We set ourselves the goal of completing *Warlords II Deluxe*, no game, no *Origins*. Well we were close but we blew it. Sorry we failed to make it but we stayed at home and finished the game instead.

OF DELUXE AND BLITZKRIEG

For a while now we have been saying that our next release would be *The Last Blitzkrieg*, our game based on the Battle of the Bulge in 1944-5. So what, you may ask, is *Warlords II Deluxe*? For the answer to that let us go back several months to the time we made the decision to delay *TLB* and produce another

product in the *Warlords* series. It all started when we began discussing the large number of user-created scenarios we had received for *Warlords II*. Somebody broached the idea of releasing a scenario pack. Suddenly it was as if a floodgate had been opened. Suggestions flew thick and fast on extras we could include. 256 colours, networking, castle and dungeon terrain sets, the much requested undo move function, smaller random maps, better AI, better diplomacy, improved construction kit, faster game play etc, etc,.

By the time we had gone through the list it was clear that we had the potential for a complete upgrade. And so it came to pass.

The artists and the programmers have delivered a game which is heaps faster, heaps better looking, has a stack of new options and squillions of new scenarios. As soon as you see *Warlords II Deluxe* the world of Etheria will never be the same again!

Which brings us back to *The Last Blitzkrieg*. Yes it moves ever on, albeit slowly while we were moving full speed on *Deluxe*. Most of the graphics are in and the scenarios are finalised. Now that *Warlords II Deluxe* is finished we will be powering into *Blitzkrieg* and hope to have it completeed within a couple of months. The next issue of the magazine should definitely have a *TLB* scenario.

Speaking of the magazine; yes it's late again. We just didn't want to send it out with its beautiful Nick Stathopolous cover art before we had finished the game. *Run 5* was held back until the release of *Warlords II Deluxe* so that the *Warlords II* scenario could make use of the improved system. We hope you understand.

For those readers who have been following the Patton vs Montgomery debate between myself and Richard McRae I am sorry to say that I have decided to end it.

Debates on the pro's and con's of individual commanders can go on for ever and ultimately there are no clear cut answers. I have enjoyed the letters which I have received from subscribers and I will draw particular attention to the contributions of William Rink and Anthony Howarth whose arguments I appreciated. Were I to continue the debate gentlemen, yours would be the letters I would publish.

IN THIS ISSUE

To a certain extent the great debate continues with SSG's book of the quarter, Correlli Barnett's The Desert Generals. I read this book after the debate started and it only serves to reinforce my views as to what an overrated general Montgomery was.

The *Decisive Battles* Scenario deals with the British victory over the Mahdist Sudanese army at Omdurman in 1898. Steve Ford's article covers the entire history of Mahdism, putting the battle in a clear perspective. It is a depressing fact that in the late nineteenth century a Sudan ruled by Sudanese was perceived by most European powers as being a power vacuum.

The *Carriers at War* scenario is a hypothetical refight of the Battle of the Coral Sea in 1946. Japan has won the war in the Pacific but America, Britain and Australia have had enough. The fighting has restarted and once again U.S. ships are protecting Australian waters. This is another scenario by Lt. Commander Richard Mater, our friend in the RAN.

NEXT ISSUE

Can the *Decisive Battles Game System* work for Napoleonic battles? You be the judge as you refight Waterloo, Napoleon's final battle. Smash through the rag-tag Allied army to Brussels and victory. Or alternatively, hurl Monsieur Crapaud back to Paris with a hail of good British lead.The scenario will have half hour turns which will give the French a chance to thrash Welling-

Continued on p. 48

Book of the Quarter

Some people have suggested that we at SSG have 'got it in for' the British Army and British generals in particular. This is of course completely untrue and we will soundly refute anyone who spreads such scurrilous rumours. Just to prove it in this issue I'm reviewing Correlli Barnett's classic study of British generalship, *The Desert Generals*.

In Issue 22 one of our correspondents argued that we treat Field Marshal Montgomery too harshly and I felt the need to reply at length explaining just why we feel that Montgomery was at best mediocre and at worst a third rate commander, a liar and a braggart.

After the release of Issue 22 *The Desert Generals* was recommended to me by a friend who, on the basis of what I had written, was frankly surprised that I had not already read it. I was delighted to find a book which reinforced practically all of my judgements as to the relative competence of British commanders in the western desert between 1940 and 1943.

Finding that somebody else has come to the same conclusions as oneself, and expressed them with somewhat more authority is extremely reassuring, which may be why I enjoyed this book so much.

The reason why Correlli Barnett wrote *The Desert Generals* was, in his own words, because "most of all I wanted to redress the injustice done to Sir Claude Auchinleck and to puncture the inflated Montgomery myth."

The book was first published in 1960, a mere two years after the release of Montgomery's own memoirs and, Barnett admits very much as a response to that work. What was seen by many as dangerous heresy in 1960 is, 34 years later, much the accepted historical line.

So who were the men who commanded the Commonwealth forces in the Western Desert, the so-called Desert Gener-

Continued on p. 15

THE Q STORE

RUN 5

SUBSCRIPTION RATES

(4 issues)

IN AUSTRALIA

Magazine/disk sub. = $AUD 65.00
Magazine only sub. = $AUD 20.00

IN NORTH AMERICA

Magazine/disk sub. = $USD 65.00
Magazine only sub. = $USD 20.00

ELSEWHERE

(Surface Post)

Magazine/disk sub. = $AUD 80.00
Magazine only sub. = $AUD 35.00

(Airmail Post)

Magazine/disk sub. = $AUD 90.00
Magazine only sub. = $AUD45.00

To subscribe, consult the schedule of fees above and make sure you include your computer type (IBM or Mac) with your cheque or money order if you want a disk subscription.

BACK ISSUES

Single Issue = $AUD 6.00
Plus $AUD 1.00 shipping (max.)

Customers outside North America or Australia should add $2.00 per mag. surface shipping or $4.50 per mag. air shipping.

Customers in North America should send their Visa, Mastercard, cheque or money order to -

Strategic Studies Group Inc.
P.O. Box 30085, Pensacola, FL.
32503-1085. USA.
(Tel: 904-469-8880; Fax: 904-469-8885)

Customers in Australia and Elsewhere can dial direct (Tel: 02-819-7199; Fax: 02-819-7737) for Visa and Mastercard orders or send their cheque or money order to- (European Customers should note that Eurochecks are not acceptable)

Strategic Studies Group Pty Ltd
P.O. Box 261, Drummoyne, NSW.
2047. AUSTRALIA

GAMES

Direct Order From SSG

IN NORTH AMERICA

FOR IBM

Carriers at War ($USD 49.95)
Carriers at War II ($USD 49.95)
Warlords II Deluxe ($USD 49.95)
Carriers at War Construction Kit ($USD 40.00)
Decisive Battles of the American Civil War
Vols 1 - 3 ($USD 35.00 ea)

FOR MACINTOSH

Warlords II ($USD 49.95)
Carriers at War ($USD 49.95)
Carriers at War II ($USD 49.95)
Warlords ($USD 49.95)
Decisive Battles of the American Civil War
Vols 1 - 3 ($USD 39.95 ea.)
Battlefront Series Games - Halls of Montezuma, Rommel, Panzer Battles, MacArthur's War ($USD 39.95 ea.)

IN AUSTRALIA (& ELSEWHERE)

FOR IBM

Carriers at War ($AUD 89.95)
Carriers at War II ($AUD 89.95)
Warlords II Deluxe ($AUD 89.95)
Carriers at War Construction Kit ($AUD 75.00)
Decisive Battles of the American Civil War
Vols 1 - 3 ($AUD 50.00 ea.)

FOR MACINTOSH

Warlords II ($AUD 89.95)
Carriers at War ($AUD 89.95)
Carriers at War II ($AUD 89.95)
Warlords ($AUD 75.00)
Decisive Battles of the American Civil War
Vols 1 - 3 ($AUD 60.00 ea.)
Battlefront Series Games - Halls of Montezuma, Rommel, Panzer Battles, MacArthur's War ($AUD 50.00 ea.)

Customers outside North America or Australia should add $5.00 per game for surface shipping or $10.00 per game for airmail shipping.
Florida residents add 6%.

LETTERS TO THE EDITOR

Dear Sirs,

I have been a fond admirer of SSG's work ever since I played *Reach For The Stars* on the C64 about 5 years ago. I went on to purchase a number of games for the C64, such as *Rommel* and *Carriers at War*. Like many other people, I have found your products to be superior to any other on the market.

My primary purpose in this letter regards your new strategy game on WWII. I have been a bit of a WWII nut ever since I played Microprose's 'Crusade in Europe' on the C64. Even though the game's command structure was totally unrealistic, the number crunching involved in keeping track of your divisions really appealed to me. Seeing how individual divisions fared through the rigours of combat was also (to me anyway) fascinating.

Ever since then, I have read a lot of books on the subject, and I have also found some of your articles in RUN 5 enlightening. However, one feature in these games that I have never seen, and would dearly love to see, is a recreation of the historical battles. ie. a scenario that plays by itself where all the dice rolls have been rigged to recreate what actually happened. Of specific interest to me in such a scenario is the Order of Battle, ie. where exactly in the line each division was, and which higher level unit each division was subordinate to. Also of interest is the level of combat effectiveness that each division had at a particular time.

I think that such a scenario would generate a lot of interest in wargaming circles as well as possibly with military historians. You could have an option that let the observer intervene from a certain point onwards. Such a scenario would also stimulate those people that play these games and treat them simply as games rather than simulations. It could help to expand your consumer

Continued on p. 45

The 'Supremacy' of the Longbow: A Military Myth

by Stephen Hand

Amongst certain military enthusiasts there exists an opinion that the longbow was the ultimate weapon of the medieval period and that it was superior to firearms up until the advent of the breech-loading rifle. Upon examination this argument cannot be upheld. The available evidence suggests that, not only was the musket a clearly superior weapon to the longbow but that even during the middle ages the longbow did not enjoy the dominance which some insular English historians have suggested.

The Rise of the Longbow

The longbow is inextricably linked to the Hundred Years War and its role in the English victories of Crécy, Poitiers and Agincourt. However, it first came to prominence in the Scottish wars which continued, on and off for the 50 years prior to the war with France.

The traditional view as to the origin of this weapon is that Edward I adopted the longbow from the Welsh after defeating them in the wars of the 1270s and 80s. The truth, as truth tends to be, is considerably more complicated.

The word 'longbow' was never used in the middle ages. A bow, unless it was a crossbow, was simply a bow.

There are six foot yew bows dating from late Roman times and there are short bows dating from the fifteenth century.

All that can be said with certainty is that the average length of bowstaves increased throughout the medieval period. Furthermore recent research suggests that the bow was a successful auxiliary weapon in medieval armies as early as the eleventh century.

For example, at the Battle of the Standard in 1138 archers in the English Army were interspersed with professional spearmen and dismounted men-at-arms (a generic medieval term used to describe armoured shock cavalry, the term would include knights, squires and sergeants).

The poorly equipped Scottish launched a series of charges which resulted in them being routed by a combination of archery and stout defence from the more traditional arms.

John of Hexham stated that the Scots were destroyed by arrows. It is clear from accounts of the battle, however, that the main reason for the victory was efficient use of combined arms. This is a point which will be repeated throughout this essay.

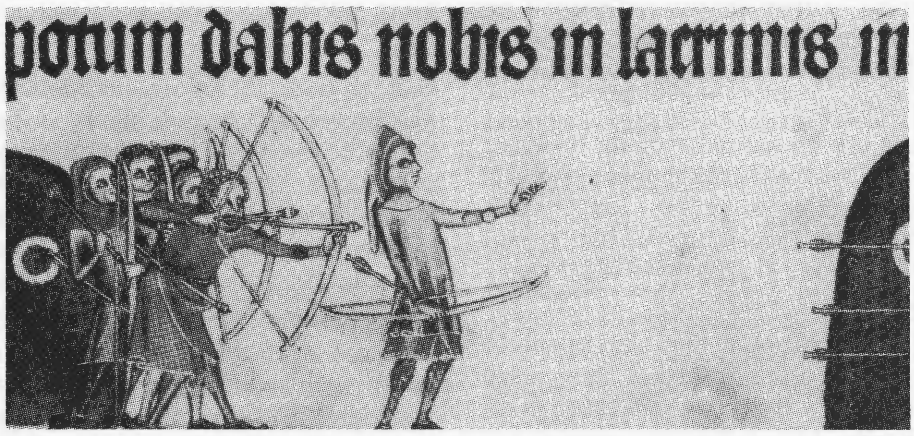
So, if, as the evidence suggests, there was no miraculous new weapon then why did the 'longbow' suddenly acquire a military prominence?

Firstly, and most importantly it should be stated that the longbow was only used in great numbers in the English Army.

Despite what the majority of military enthusiasts, being of English or at least British descent, might think, England was a damp island on the periphery of Europe and had little influence on the overall development of the military art.

Therefore the 'prominence' of the longbow has been greatly influenced by the subsequent domination of the world by the British and their English speaking colonies such as the United States, Canada and Australia.

English archers were widely used throughout Europe as mercenaries in the century and a half following the



Fourteenth Century archers target shooting

battle of Crécy but in no continental army were they the numerically dominant arm as they were in England.

The first battle traditionally associated with the rise of the English longbowman is Falkirk in 1298. Here, according to the longbow legend, Edward I used his Welsh archers to destroy the Scottish schiltrons (large formations of pikemen).

Although there were certainly a large number of Welsh at Falkirk very few of them were archers. Anyway as the Chronicler Langtoft states, 'the Welsh gave no assistance in the battle'. Two other chroniclers, William Rishanger and Walter of Guisborough go further and claim that the Welsh defected to the Scots.

All the chroniclers of Falkirk mention the part played by the archers in breaking up the schiltrons but it is not specified how many of these archers were crossbowmen (some certainly were) or in fact how many archers were present. So much for the longbow at Falkirk.

The next major battle against the Scots was Bannockburn in 1314. Comments made by Geoffrey le Baker give some indication of the developing tactical position of the archers.

le Baker states that 'the phalanx of archers did not have its usual apt position, but was stationed to the rear of the armed men, not on the flank as was usual'.

In the course of the battle as things went badly for the men-at-arms some of the English archers redeployed on the right flank of the army and began shooting into one of the Scottish schiltrons.

It is not known how many bowmen were involved in this manoeuvre but it was enough to prompt the Scottish chronicler Barbour to state that 'if only their shooting had lasted it would have been hard for the Scots'.

The reason the bowmen were unable to keep shooting was that they were charged by the 500 or so Scottish men-at-arms. Although lightly armoured in comparison with the English, the Scottish had no trouble closing with their opponents and scattering them.

Two Scottish knights were killed in the entire battle, presumably in this charge. The unsupported archers were clearly unable to face charging knights. So much for the triumph of archery over armour.

It was not until Dupplin Moor in 1332 that English archery came of age. Here a small English army of 500 men-at-arms and 1000 foot deployed defensively against a much larger Scottish army.

The Scots charged up a gentle slope and slammed into the English men-at-arms. During this melee the Scottish flanks were assailed by the archers.

The combination of hard strokes and arrows being shot into a dense body of unarmoured men was enough to break the Scottish morale. The schiltron collapsed and the individual Scottish soldiers fled. After remounting, the English men-at-arms thundered after the Scots with predictably bloody results.

Dupplin Moor has been taken as a victory of English archery but was it? The Scots reached the English line despite the best efforts of the archers.

Had the English Army consisted solely of archers it would have been defeated (unless you wish to suggest that archers could defeat pikemen in melee).

The English success depended on the archers being shielded by the dismounted men-at-arms and the other infantry so that they could continue firing, i.e. it depended on combined arms.

Halidon Hill in 1333 was a similar story. The English archers were placed on the flanks of the army and the men-at-arms again dismounted. The Scots attacked uphill in schiltrons and were broken by a combination of archery and solid fighting.

The Bridlington Chronicle states that the Scots 'were able to sustain neither the force of the archers, nor the arms of the knights'. Once again combined arms had succeeded. It did again at Neville's Cross in 1346 when the English attacked the Scots. The archers broke the order of the schiltrons which were then attacked successfully by mounted men-at-arms.

So what can be established about the effectiveness of the longbow from the Scottish Wars? The main lesson to be learned is that the longbow itself was not the significant innovation that it has been supposed. Rather the way in which it was employed raised it from an auxiliary weapon to a partner with the more traditional arms.

Bows had been a significant auxiliary weapon in medieval English armies from Hastings until the end of the Thirteenth Century. At times they proved tactically decisive. Why then did English armies of the Twelfth Century not increase the number of bowmen as they did at the end of the Thirteenth Century? The answer lies in the recruiting practices of the times.

In the Twelfth Century, apart from a minority of mercenaries the army was formed on the basis of feudal obligation.

Except for the men-at-arms there were no professional soldiers amongst the feudal levy. Hence archers would not be trained for war and such skills as volley firing and even keeping a formation would have to be taught to each new group of soldiers.

The Fourteenth Century saw the advent of centrally paid armies raised for the duration of the campaign. This was made possible by the conversion of feudal obligation into scutage (literally 'shield money').

The king was able to pay the bulk of his troops, men became professional soldiers and therefore the professionalism of the army increased. Archery was able to be employed more scientifically and therefore more effectively.

Against the mass unarmoured target of a Scottish schiltron this proved very effective indeed. However, as the above study of the Scottish Wars shows, archery had its limitations.

The defencelessness of the archers when charged by the Scottish horse at

Bannockburn shows their need for support.

In all of the English victories the archers had been protected by the men-at-arms who were in their turn supported by the shooting of the archers.

Just as men-at-arms could not break a schiltron without assistance the archers did not have sufficient firepower to stop the attack of either pikemen or knights. The success of the English was based on the intelligent and professional application of combined arms.

The Golden Age of the Longbow

The Hundred Years War is usually seen as the highpoint of the longbow. Surely the battles of Crécy, Poitiers and Agincourt prove the effectiveness of the longbow against the armoured knight?

On the contrary, what these battles do show is the effectiveness of a paid army with coherent leadership against an army raised under the old feudal levy system.

Crécy in 1346 was the first major land battle between the French and the English. The chroniclers agree that the archers were placed on either flank of the men-at-arms who were deployed in three divisions, that of the King himself in the centre and slightly refused.

The French Army included a significant number of Genoese crossbowmen who were sent forward at the start of the battle.

Whether, as some sources suggest, the Genoese had allowed their bowstrings to become wet or they were simply outshot by the English is impossible to know.

Whatever the reason for their poor showing the Genoese began to take casualties and routed. The French men-at-arms rode through them and charged the English line.

Upon charging, the French found 'a great hedge of archers and men-at-arms in front of them that had remained unbroken.' All the chroniclers comment on the number of horses killed and injured by arrows and upon the confusion that this created amongst the French.

The Battle of Crecy
This portion of an illumination from a copy of Froissart's Chronicles shows the battle being fought with the equipment of the mid-fifteenth century

This is significant because of the emphasis placed on the horses over the riders. Why should the horses be noticeably more vulnerable than their masters?

One answer is that horses present a larger target. Another, and more significant answer is that they lacked the armour of their riders.

In 1346 armour was undergoing a transition from mail to plate. Mail, while very effective against edged weapons was less so against points.

The main protection against a thrust would be the gambeson, or padded tunic, worn under the mail. The Saracen chronicler, Ibn Hudail spoke of the felt garments worn by crusaders that protected them from arrows.

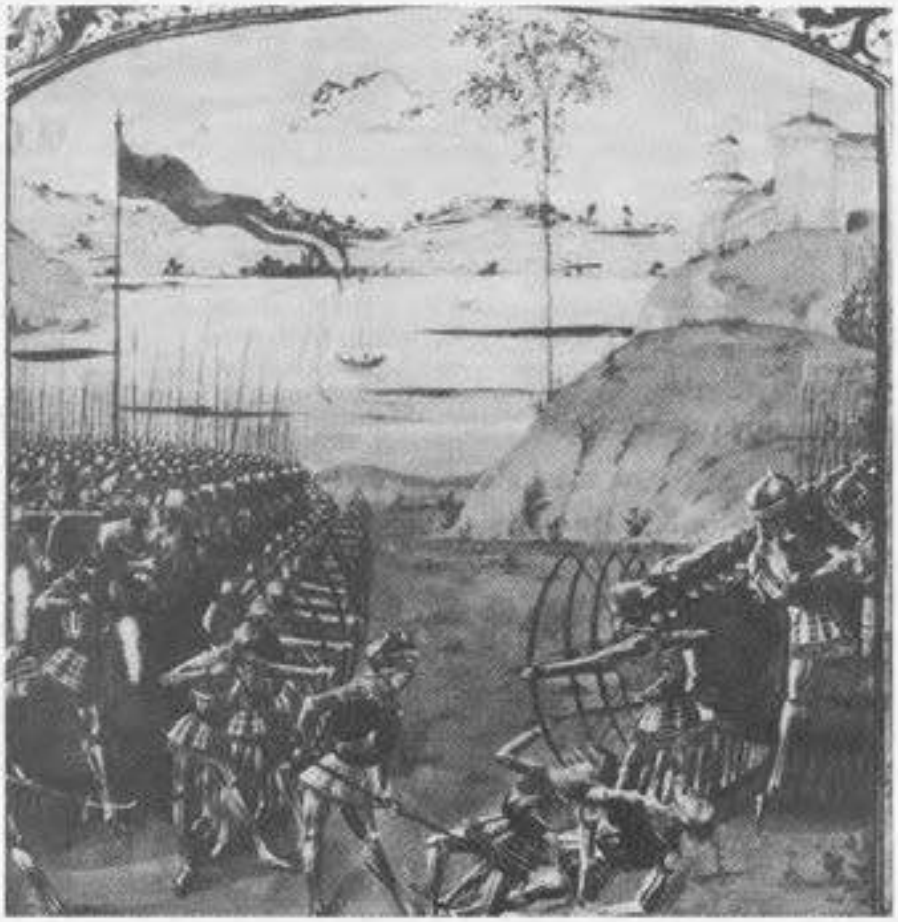
Modern tests undertaken by the Tower of London armouries have shown that mail offers little protection against the armour piercing bodkin points of English arrows.

In the same series of tests a case-hardened breastplate proved impervious to such arrows even when struck square on. The effectiveness of plate armour will be mentioned again in relation to the argument of the musket vs the longbow.

In 15 charges at Crécy the French did not succeed in breaking the English line. Regardless of the protection enjoyed by the men-at-arms plate armour had gaps.

Some Frenchmen were killed by arrows and more were killed trying to fight their way through the English. However, the fate of each charge had been decided when English arrows began to bring down French horses.

Jean le Bel states that the French horses 'piled up like a litter of piglets'. This has often been taken to indicate huge piles of dead horses all killed by ar-



A Fifteenth Century Illumination from Flanders
Archers now form the vanguard of each army and act in much the same way as skirmishers did in ancient battles

rows. However, anyone who has seen a litter of piglets tumbling over each other to get at a teat will be familiar with the image Le Bel is trying to create.

It is more likely that Le Bel was implying that many French horses simply collided with those horses felled by arrows.

A charge with any cohesion requires the horsemen to be close to one another. This not only creates a concentrated target but also creates the perfect situation for a massive pile up.

Had the men-at-arms been charging unsupported archers they would have been able to adopt a looser formation. However, in order to have any chance to break the English dismounted men-at-arms they were forced into a tighter formation which made their horses vulnerable to massed archery.

Men do not have to be dead for a unit's battlefield effectiveness to be severely reduced.

The vulnerability of the French horses to archery and the resultant loss of unit cohesion meant that the French who reached the English line did so piecemeal. Had they been facing only the archers this would not have mattered. Instead they were facing dismounted men-at-arms, i.e. men as well trained and armed as themselves. Once again combined arms won the day.

What Crécy taught the French was that mounted men-at-arms were vulnerable to archery, at least on the scale and with the discipline of the English. Crécy drove the French off their unarmoured horses.

At Poitiers in 1356 the bulk of the French men-at-arms dismounted, no doubt reasoning that where mounted charges had failed, one on foot would not. Those Frenchmen who remained on horseback attacked two separate points of the English line which was entirely behind a hedge.

By this time many horses had been equipped with armour covering their heads and the front of their bodies. It was noted that the English archery was less effective than it had been at Crécy.

Once the French had become engaged, a body of archers was moved forward to a point where they could enfilade the French flank. Many horses were wounded in the flank and rear.

The first French division then attacked on foot. Relatively unaffected by arrows the French men-at-arms came up against the hedge in front of the English position and became embroiled in a melee.

The French were tired from marching uphill, demoralised from being shot at and they were attacking men of their own calibre who had the advantage of high ground and an impenetrable hedge.

After a hard fight the first division retired. Two of the French king, Jean's sons left the battlefield at this point accompanied by a large number of men-at-arms. Seeing this Jean's brother the Duke of Orleans retired with his entire division.

As the English archers gathered used arrows from the battlefield the third French division advanced under the command of King Jean himself. It struck the English line which was forced back under the weight of overwhelming French numbers.

Earlier in the day the Black Prince had placed a reserve under Captal de Buch on a hill that commanded his right flank. This force of three hundred men-at-arms and the same number of archers had laid idle due to the crude tactics used by the French. Prince Edward now committed this force which probably attacked on horseback. The shock of being struck in the flank by a force of, to them, unknown size was enough to rout the French and the battle was won.

Far from being a victory for archery the English bowmen contributed more to the English cause as light infantrymen in the melee than they did with their bows. Discipline, choice of terrain, good deployment and the skilful use of reserves won the battle.

While the French showed, by dismounting, that they had learned from Crécy their tactics, a series of frontal assaults, demonstrated an over reliance on brute force. The better army won the battle, despite the French armour all but nullifying the effect of the longbows.

If any battle has captured the public imagination as a symbol of the 'triumph' of the longbow it is Agincourt. In 1415 Henry V in command of 1000 men-at-arms and 5000 archers gave battle to a French army of 20 or 30 000.

There were several tactical innovations at Agincourt, the use of stakes to protect the front of the archers rather than natural obstacles and the use of wedges of archers between each of the three divisions of men-at-arms.

The lack of a clear commander and the tactical moribundity of the French can be seen at the start of the battle when the English were able to advance and reset their stakes with no interference.

If the French had attacked at this point the English could have been thrown into confusion and decisively beaten. As it was the battle opened with a few long-range volleys from the bowmen which goaded the French into an attack.

As at Poitiers the first French attack was on horseback. Approximately 500 men-at-arms in two bodies charged the archers on either wing of Henry's army.

On the English right the horses refused to impale themselves on the stakes of the archers. On the left, however, the charge continued right onto the defences. Many French horses were killed.

Those men who were still mounted began to retreat and the archers came out from behind their stakes to gang up on the few unhorsed knights who remained. The first French attack had been driven back but not by archery.

Longbow versus Musket: Facts and Figures

Weapons are all about delivering energy, usually kinetic energy, into a human body. The more energy you can deliver, the worse the other guy will feel afterwards, but hey, that's war. In the case of missile weapons the important numbers are the weight of the projectile and the speed with which it leaves the weapon. The formula for the initial kinetic energy (IKE) of the projectile is

$$IKE = 1/2\ mv^2$$

where m is the mass of the projectile and v is its initial velocity. Arrows weigh between 25 and 30 grams so for the purpose of the exercise we will assume the larger mass; 30g or 0.03Kg. The initial velocity of an arrow depends on the weight of the bow but an average figure is about 140 feet or 42 metres per second. So using our formula for an arrow from a longbow our IKE is

$$1/2 \times 0.03 \times (42^2) = 26.5 \text{Joules}$$

For our musket the weight of the projectile depends on the calibre. For a musket of 0.75" calibre (a common calibre in the Sixteenth and Seventeenth Centuries) a lead ball weighs 40.3g or 0.0403Kg. The muzzle velocity of a musket depends to a large extent on the barrel length. An arquebus belonging to the author was recently measured as having a muzzle velocity of 800 feet or 240 metres per second. Muskets with their longer barrels had a higher muzzle velocity, averaging around 1,200 feet or 360 metres per second. A large wall mounted musket was found to have a muzzle velocity of 1,500 feet or 450 metres per second. We will use the intermediate figure of 360mps. So for our musket the IKE is

$$1/2 \times 0.0403 \times (360^2) = 2611 \text{Joules}$$

In other words a matchlock musket delivers one hundred times the energy of a longbow arrow.

This is of course not the full story. Arrows are more aerodynamic than musket balls and therefore their velocity drops less rapidly in flight. Arrows are also sharp which makes them very effective at piercing soft things. It is not surprising therefore that medieval armour was case hardened so that the outer surface was about as hard as it is possible for steel to be. This made it very unlikely that anything softer, like an arrow head, could penetrate it. Musket balls have energy to burn and are also, being lead, quite soft. Therefore musket balls shatter rather than penetrate hardened steel.

In order to test the theory with real weapons the author and some colleagues obtained a surplus Swedish army helmet. This was constructed of hardened steel but was a uniform hardness throughout rather than being case hardened like medieval armour. The outer surface was therefore slightly softer than that of a medieval helmet and the inner surface a great deal harder. Overall it was the best approximation that could be found without destroying an item of genuine medieval armour.

Continued on next page

Longbow vs. Musket: Facts and Figures - from previous page

The helmet was set up on top of a man sized target at a distance of 100m (333 feet). Twelve musketeers, none of whom fires live ammunition more than twice a year each fired twelve rounds at the helmet. Three hits were recorded on the helmet and approximately 50 on the whole target. The helmet was entirely shattered. The musket balls had not penetrated cleanly but had caused long fractures, resulting in large sections of the helmet folding in.

As a comparison a group of archers was invited to shoot at the same helmet. All but one of these archers used a modern bow with target arrows but one of the archers was using a replica longbow with a 60lb draw weight and arrows with hand forged 'bodkin point' heads. All of the archers practiced at least once a month with several of them practicing archery once a week or more.

The first interesting point was that despite being told that the musketeers had been firing at a range of 100m the archers chose to set up the helmet no more than 10m from their shooting line. The next surprising thing was the appalling accuracy of the archers.

Approximately 150 arrows were shot at the helmet and four hits were recorded. Two of these deflected off without marking the helmet, one struck square on and broke and the fourth, one of the bodkin points from the genuine longbow actually penetrated the helmet to a depth of approximately 1mm. Had the helmet contained any padding the wearer would have survived without a scratch. The most interesting point of the whole exercise was that the archers seemed to view this as a victory.

Another point worthy of mention is that although archers can achieve rates of shooting in excess of six arrows a minute this is done at the cost of accuracy. Whenever the author has observed archers shooting for accuracy their rate of discharge drops to two or three arrows per minute. There is no reason to suggest matters were different in the middle ages.

Once again longbowmen had shown themselves unable to stop the advance of non-missile troops without support, this time from field fortifications.

The attack of the cavalry had been a skirmish compared to the advance of the first French division. Moving forward on foot this massive body of men-at-arms was almost unaffected by the English archery.

Slamming into the English line the French had enough momentum to throw their opponents back 'two spear lengths', maybe 12 to 15 feet (4 to 5m).

Against all but the best and most disciplined force this terrible impact would have been decisive. But the English men-at-arms, the unsung heroes of the Hundred Years War, took the blow and held. The immediate result of this was that the front ranks of the French were crushed into the English line by those advancing behind them.

The ensuing melee was confused as it rapidly became clear that only the English had enough space to effectively use their weapons.

Numerous Frenchmen were killed and captured. As the fight continued the archers ran out of arrows and joined the fight by attacking the French flanks as light infantry.

Whereas their shooting had produced no notable effect the addition of 5000 men to the melee, even 5000 unarmoured men, was decisive.

Unable to break through the English line and being pressed on their flanks the French began to retreat.

As men fled the Dukes of Alençon and Bar ordered the French second division forward. In their attempt to reach the front the men of the second division worsened the crush in front of the English men-at-arms. Alençon and Bar forced their way through and were both killed in the melee.

Although the French still outnumbered the English they were rapidly running out of commanders. The Duke of Brabant arrived late on the field and immediately joined the melee where he was killed.

The Counts of Masle and Fauquenberg threatened a cavalry attack late in the day but nothing materialised. Bereft of leadership the survivors of the first and second divisions broke off the fight and left the field. There was no pursuit.

This, then was Agincourt, the 'great victory of archery over armour'. A massive melee in which the bowmen contributed more as light infantry than with their chosen weapon. By this stage plate armour was fully developed, if not fully refined. The men who wore it had little to fear from archery.

Not one notable French leader was killed or injured by an arrow (although William de Saveuse, leading one of the initial cavalry charges had his horse shot out from under him).

There were 5000 English archers at Agincourt. Each man was supplied with two sheaves of 24 arrows. One point on which all the chroniclers agree is that the English shot off all their arrows and were forced to scour the field for more.

Therefore we can assume that all 240,000 arrows supplied to the longbowmen were shot off. What is more, with the exception of the initial cavalry attacks, the archers were not actually attacked and were able to shoot into the French as if they were on a range. The English longbowmen were given every opportunity to aim.

At the end of the battle there were 6000 French dead, piled, we are told for the most part, around the banners of the three English divisions.

So even if we assume that only 1000 men died in the melee (and it must have been several times that number) each archer would only have been responsible for one dead Frenchman with his entire 48 shots. One presumes that at least half of these arrows must have

been delivered into the flanks of the French first division at point-blank range. So much for the marksmen of myth who could thread an arrow through a visor at 100 yards.

Agincourt was a victory for the English dismounted man-at-arms in which the longbow made a contribution. Why it is persistently viewed as having been the other way around is one of the oddities of history.

The Longbow After Agincourt

Whatever the physical effect of massed archery on the heavily armoured French the moral effect was quite great. In battle after battle the chivalry of France were forced to dismount and advance under a hail of arrows while their opponents, the English men-at-arms rested on their weapons.

It was not surprising therefore that the French would want to change this situation by raising their own archers. At Vernuil in 1424 the French had a large body of Scottish archers who exchanged a murderous fire with the English.

While the men-at-arms on both sides watched from the safety of their armour the unarmoured bowmen killed each other. Although the English won the battle a new phase had begun in the history of the longbow.

During the later part of the Hundred Years War French archery offset, and sometimes outdid that of the English. Another factor also became significant, field artillery.

The early guns were heavy, slow to deploy and to load. They did, however have the advantage of knocking holes in castle walls quicker than any other type of engine.

While their battlefield use was limited, it could sometimes be decisive. At Formigny in 1450 the French guns bombarded the English archers at long range.

The only way the English could reply was to break ranks and charge the guns. Although initially successful they were scattered by a French counterattack.

In an attempt to mimic the English, the French had begun to raise bodies of professional soldiers from within their own country. As both armies became closer in quality it was the French who proved more innovative and who used more tactical finesse.

By the end of the Hundred Years War the English army was becoming dangerously obsolete. The English, however, had as much difficulty recognising this as the French had done in the years between Crécy and Agincourt.

During the Wars of the Roses archery was used to a great extent by both sides. In pitched battles, however, the bow was increasingly becoming a secondary weapon. The men most at risk from arrows were the archers themselves.

Only in a few battles, such as Towton where the Yorkists decisively won the archery duel, did archery play any significant part. Normally the longbowmen would account for each other before the men-at-arms got down to the real business. Even at Towton where the Lancastrians had to advance through a Yorkist arrow storm the main damage was moral rather than material.

As armour became cheaper and therefore more widespread archery became almost irrelevant. Flodden in 1513 was the last great English victory over the Scots.

Unlike the wars of the Fourteenth Century the Scots pikemen at Flodden were well armoured. Bishop Ruthal writing ten days after the battle stated that "they were so well encased in armour that the arrows did them no harm".

Half a century earlier the armourers guild of Angers had advertised their first quality armour as being proof against crossbows. Armour of the second grade was still guaranteed to be proof against ordinary bows.

Far from the legendary victory of archery over armour, by 1500 it was becoming clear to all but the most diehard toxophile that armour had triumphed over the bow. The introduction of windlass drawn steel crossbows of up to 1200 lbs draw weight was an indication of the need for a more powerful missile weapon. Crossbows, however powerful, were not the answer; guns were.

The Rise of the Gun

The first indisputable mention of guns in Europe is from Florence and is dated 1326. An English illuminated manuscript dated to the same year shows a bottle shaped gun firing an arrow. It was soon realised that a stone or lead ball was a far more efficient projectile for the new weapon.

Although the earliest guns were cannon it was not long before smaller 'hand guns' were being produced. These were initially tubes on a stick fired in much the same way as cannon.

Although the first hand guns were hopelessly inefficient, slow to load and hard to aim, they were used. This is the largest problem encountered by the pedlars of the longbow myth. If the first guns were so bad (and compared to later ones they undoubtedly were) why were they used in preference to a longbow.

Spurious arguments such as the ease of training gunners as opposed to archers fail to take the crossbow into account. In the Fifteenth century the crossbow was making a resurgence due to its greater ability to penetrate armour.

The crossbow was drawn by a windlass and therefore did not require the muscle development of a longbowman. It was easier to aim, being sighted along the bolt. Firing a crossbow did not require any more training than firing a gun, and yet guns replaced the crossbow as surely as they did the longbow.

The one factor which assured the continued use of hand guns, despite all their faults was their ability to penetrate armour (see the side bar). In 1430 Pietroni Belli wrote of seeing a bullet from a handgun pass through three unarmoured men.

With the introduction of corned gunpowder in the mid Fifteenth century

Give Fire
A musketeer discharges his piece in Jacob de Gheyn's Exercise of Armes the first known European drill manual.

guns became even more powerful. On the continent some states were quick to see the advantages of firearms. In 1490 the Venetians replaced all their crossbows with guns.

By the beginning of the Sixteenth century handguns had evolved into something more recognisable to those familiar with modern guns. The first 'locks' had been introduced along with a stock so that the gun could be braced against the shoulder and sighted down the barrel.

The matchlock was a simple spring mechanism whereby a burning cord or match which was held in steel jaws (the serpentine) could be lowered into the priming pan by pulling a trigger. The cord had been boiled in saltpetre and burned at a rate of approximately a foot (30cm) an hour. The 'arquebus' was loaded by pouring a measured charge of powder down the barrel followed by a lead ball and some sort of wadding to hold the whole lot in.

This was rammed home using the ramrod and the pan was then primed with more powder. Finally the match was replaced in the jaws of the serpentine, the pan cover was pulled open and the trigger pulled.

While this might seem to be a cumbersome and complicated drill it can be taught to rank beginners in about an hour. After several hours of drill it is possible to load and fire an arquebus in 30 to 40 seconds.

The Italian wars between 1494 and 1525 saw the first use of massed firepower in battle. During the early part of the wars cannon and pike dominated the battlefield. It was not until the battle of Bicocca in 1522 that hand-held firearms were used in the type of mass formations approaching those used by English archers.

While both the Spanish and the French had large trains of artillery only the Spaniards made use of arquebusiers in great numbers. At Bicocca they were deployed behind a ditch along with the cannon.

Swiss pikemen in the pay of the French advanced on the Spanish and by the time they reached the ditch they had suffered over a thousand casualties.

Undismayed the Swiss clambered into the ditch where they received four volleys in rapid succession from the Spanish arquebusiers. The Spanish were deployed in four ranks which suggests that they may have delivered volley fire by rank.

The effect of this fire on the Swiss was devastating. Giovio records that the first four ranks were all killed. The front ranks of the Swiss pike block were always the most heavily armoured but this appears to have made no difference. In the words of Sir Charles Oman 'the best storm-troops in the world had failed before the arquebus'.

If we compare the events at Bicocca with those of Flodden where English longbowmen shot at an identical for-

mation we can immediately see the difference. The longbow may have a greater rate of fire but what use is this if the arrows cannot injure their targets.

The battle of Pavia in 1525 was another milestone in the development of warfare. The city of Pavia was besieged by the French who were themselves in turn opposed by a Spanish relief army.

In a daring night move the Spanish quit their trenches and made a flank march against the French. The morning saw the Spanish concentrated to the north of Pavia while the French were scattered around the town.

King Francis reacted quickly and moved his artillery reserve against the last of the Spanish troops as they deployed. The cannon delivered effective fire which created sufficient disorder for the French gendarmerie (knights) to charge and scatter the Spanish division. After subsequently defeating the Spanish heavy cavalry Francis brought up his Swiss infantry.

As at Bicocca the Swiss attacked frontally and as at that battle they were galled by the Spanish arquebusiers. Reaching the Spanish line the Swiss could only sustain the briefest of melees before being routed by Spanish pikemen.

Elsewhere on the battlefield Landsknechts employed by the French attacked those in the pay of the Spanish and were beaten after a hard fight. The men-at-arms with the king continued to perform sterling service until they came up against a unit of arquebusiers firing from the edge of a wood.

Unable to penetrate into the wood without dismounting, the French were blasted off the battlefield. The remnants of the French chivalry were destroyed by the Landsknechts.

Pavia and Bicocca showed that three or four close range volleys from arquebusiers were sufficient to shatter any unit in Europe.

This is not to suggest that unsupported arquebusiers could withstand a push of pike or a cavalry charge, any more than longbowmen could. Missile troops would need to be supported by heavy infantry for another century and a half until the advent of the bayonet allowed

Hold up your musket and present
The author is ready to give fire to his arquebus. He is wearing a doublet and trunk hose of civilian style. The helmet is an Italian morion, out of date by the early Seventeenth Century but still in use. The wooden bottles across his body each hold a measured charge of powder.

them to turn their guns into makeshift spears.

After Pavia the French discarded bows in favour of the arquebus and its larger and later relative the musket.

The musket had a longer barrel than the arquebus which increased both accuracy and muzzle velocity. The barrels of the period were made deliberately thick in order to avoid rupturing and so the longer barrelled musket was impossible to hold steady without the aid of a fork rest for the barrel.

Despite what some modern authors have suggested the fork rest does not significantly complicate musket drill and the matchlock musket can be fired as fast as the arquebus.

The musket made its first appearance on the field at the battle of Muhlberg in 1547 where its extra range surprised the Saxons who had thought themselves beyond harm. It rapidly entered service in all the armies of Europe, gradually replacing the arquebus.

Within a relatively short space of time the musket and arquebus were the only missile weapons used by the major continental armies.

England was insulated from the continental experiences and firearms were introduced into the English army at a much slower rate than in any of the other major powers. In addition there was a sizeable body of thought within the English military establishment in favour of retaining the longbow. Amongst these men the poor showing of English archers in the wars of religion were explained away by supposing that the archers of the Hundred Years War had been supermen.

In the 1560s William Harrison wrote that during a lull in battle, the French and the Germans would 'turne up their tailes and crie "shoote English".' Harrison goes on to state that if only Edward III's archers were alive, 'the breech of such a varlet should have been nailed to his bum with one arrow, and an other feathered in his bowels, before he should have turned about to see who shot the first'.

That such blatantly nostalgic nonsense has been accepted at face-value by generations of historians is annoying to say the least. One is reminded of the mythologising of the western gunslinger by Hollywood.

By 1584 the proscribed ratio of musketeers to archers in an English company of foot was two to one. This was despite the fact that in 1596 an arquebus cost between 12s. and 30s. while a bow cost 6s. 8d.

The debate climaxed with the chief proponents of both arms publishing their arguments in favour of their chosen weapon. Sir John Smyth wrote in favour of the longbow, making six points. These are summarised below.

1) Longbows are more accurate than muskets.

2) Longbows are more reliable and less affected by weather than muskets.

3) Under battle conditions musketeers are liable to make mistakes in their drill resulting in poor shooting.

4) Musketeers can only stand two deep while archers can shoot in formations up to six deep.

5) Muskets are heavy and tire soldiers on the march.

6) Bows have a greater rate of discharge than muskets

These points were answered by Humphrey Barwyck, an exponent of the musket

1) Archers are no longer accurate shooters (and there is much doubt as to whether they were ever as accurate as legend would have it, the majority were certainly not)

2) Rain affects bowstrings and fletchings as much as it does powder.

3) Archers can be as badly affected by nerves in battle as musketeers and will shoot wildly.

4) When Archers stand more than two deep the rear ranks are unable to fire aimed shots.

5) If a bowman is tired he cannot shoot properly, unlike the musketeer whose powder does the work for him.

6) The rate of fire of muskets had improved by the 1590s due to constant drill.

Barwyck went on to say of the musket that, 'it will kill the armed of proofe at ten score yardes [200 yd], the common armours at twenty score [400 yd] and the unarmed at thirty score [600 yd] being well used in bullet and tried powder'.

Smyth chose not to argue with these figures, limiting his rebuttal to a discussion of the musket's lack of accuracy at the ranges in question.

In 1595 the battle, if not the debate, ended when the Privy Council passed an Ordinance stating that men would no longer be enrolled as archers in the trained bands (the English militia).

England had at last come into line with the rest of Europe. Given the experiences of those English who served in continental wars during the latter half of the Sixteenth Century it is fortunate for the honour of English arms that longbowmen never had to go into battle against musketeers.

Firearms Triumphant

In the years following the adoption of firearms by every nation in Europe tactics altered to suit the new weapons.

Although it is probable that the Spanish used some form of volley firing by rank as early as Bicocca in 1522 it is not until 1594 that we can be sure of its use.

The Dutch introduced a system of countermarching whereby the front rank would fire and retire to become the rear rank. Each subsequent rank would fire and then fall off to the rear where they would have time to reload before it became their turn to fire once again.

This system of firing by 'extraduction' enabled units to keep up a continuous fire. This in its turn made the deep formations of the medieval period suicidal.

Between 1550 and 1650 the average casualties in pitched battles increased from about 7% to about 17%. The difference was firearms. In response to

the effectiveness of guns the width of the battlefield increased as formations became broader and shallower. This had the effect of making it more complex to alter formation and increased the need for competent officers.

All these factors went together to result in a massive increase in military professionalism.

Such professionalism required full time soldiers and that in its turn required a huge financial outlay from governments.

By the end of the Seventeenth Century most European governments were spending in excess of 75% of GNP on the military. Then, as today governments did not spend the equivalent of billions of dollars on reducing their military effectiveness.

Throughout the Seventeenth and Eighteenth Centuries there were occasional attempts by romantic writers to bring back the longbow.

One of the most absurd of these attempts was that of William Neade in his book, *The Double Armed Man* (1625). Neade envisaged a pikeman in full corslet armed with both pike and longbow. The concept was too silly to be put into practice and simply became one of history's amusing dead ends.

The main reason for the introduction of hand-held firearms was the efficiency of plate armour. Medieval weapons such as the bow and the sword became obsolete in favour of huge armour cracking pole arms and guns.

In 1450 a complete suit of plate armour proof against arrows weighed between 40 and 60 lb. (18-27 Kg). By 1650 a breastplate proof against pistol balls (no armour was considered proof against musket balls) weighed around 25 lb (11 Kg). An entire armour of pistol proof was considered too heavy for a man to carry.

Between 1550 and 1650 the thickness of armour increased to such an extent that the most armour the average cavalryman was prepared to wear was a breast and back, a helmet and a bridle gauntlet for the left hand. Most soldiers simply gave up the use of armour preferring to take their chances on the battlefield.

The writers who suggest that the longbow could have been reintroduced once armour had fallen into disuse miss the point that it was firearms which blasted armour off the battlefield.

Technology rarely marches backwards, particularly as, in this case, if any nation were so foolish as to rearm with bows their opponents would have been able to reintroduce armour.

Robert Barret in his book, *Theory and Practice of Modern Wars* (1598) has a gentleman speaking to a captain. The gentleman reminds the captain that in past wars the longbow had served the English well. The captain replies "Sir, then was then, and now is now. The wars are much altered since the fiery weapons first came up".

The longbow had been a useful weapon which had contributed to the rise of military professionalism. In the craft of the armourer, however, it had met its match. The personal firearm on the other hand has been with us since the fourteenth century and has yet to meet its match. ◆

THE DESERT GENERALS

Continued from p. 3

als? While it should not be the purpose of a book review to précis the book in question what care we for rules.

I intend to discuss each of the 'Desert Generals' drawing heavily from Barnett's book, which, after all, I regard as one of the best references on the subject (if it wasn't I wouldn't be discussing it, we don't review dud books here at SSG). If you want to know more than this then, you guessed it, read the book.

The first of the 'Desert Generals' was General Sir Richard O'Connor.

O'Connor

O'Connor was given command of the 'Western Desert Force' in June 1940 at a time when France was on the verge of collapse.

While France was still in the fight the Italians in Libya posed no threat, having French Tunisia in their rear. With the fall of France imminent the Italians would have only one enemy on one front and an invasion of Egypt seemed likely.

Initially the odds against the British were daunting, O'Connor had a reinforced armoured division, the seventh, admittedly the best formation in the British Army at this date.

Opposing the British was Marshal Graziani with approximately 200 000 men. Outnumbered as he was O'Connor was not anxious to bring on a fight. However, his men became accustomed to the desert through aggressive patrolling and the Italians suffered a series of minor defeats.

On September 13 Graziani advanced 60 miles into Egypt and promptly stopped. O'Connor was given additional time to prepare for a British offensive receiving significant reinforcements.

On the morning of December 9 1940 O'Connor's Offensive opened with two divisions, 7th Armoured and 4th In-

dian. It was initially designed as a five day raid because Wavell, O'Connor's superior required 4th Indian Division for his planned attack on the Italians in Eritrea.

Massively outnumbered but possessing far superior mobility O'Connor planned to attack the Italian camps around Sidi Barrani one by one.

Unconsciously adopting the command methods of the German Panzertruppen O'Connor led from the front. Lacking dynamic commanders and the mobility which was to prove so vital in desert warfare the Italians were crushed.

What was intended as a raid had become a British blitzkrieg. In the space of three days two Italian corps had been destroyed and 38 000 prisoners had been taken.

Everything that Wavell had desired had been achieved by O'Connor. 4th Indian Division was withdrawn and according to every usage of war the British should have retired to their positions at Mersa Matruh and only resumed the offensive when reinforcements became available.

O'Connor, however was not a typical British officer. Shorn of half his force he nevertheless determined to pursue the Italians to the utmost. Bardia with it's 45 000 defenders was surrounded by one armoured division.

O'Connor's success drew an immediate response from his superiors as he was given the 6th Australian Division and more infantry tanks. Although this new division was short of heavy equipment O'Connor resolved to attack Bardia immediately, which he did on January 3.

Using the same 'Schwerpunkt' tactics that Rommel was to use against Tobruk after Gazala the Australian infantry broke into the fortress on a narrow front and were followed by the tanks.

Two days after the commencement of the attack Bardia fell and O'Connor had taken another 40 000 prisoners. By the time Wavell was informed of the situation O'Connor had moved on to invest Tobruk and he had become so successful that Hitler felt the need to dispatch German troops to the theatre.

Before the Germans arrived O'Connor had a window of opportunity, a period in which he was only faced by the immobile Italians with their moribund leadership.

The port of Tobruk was vital to the supply situation and hence to the advance of any army east or west. On January 20 it was attacked by the Australians with infantry tank support. Like Bardia it fell but the assault was simply a copy of the successful one against Bardia.

O'Connor had gained the port he needed for the next jump, the one in which he was to finally crush Italian power in Libya. On January 25 an Italian force threatened with encirclement at Mechili withdrew towards the coast, ruining O'Connor's plans. Intelligence suggested that the Italians were quitting Cyrenaica to regroup in the Gulf of Syrte.

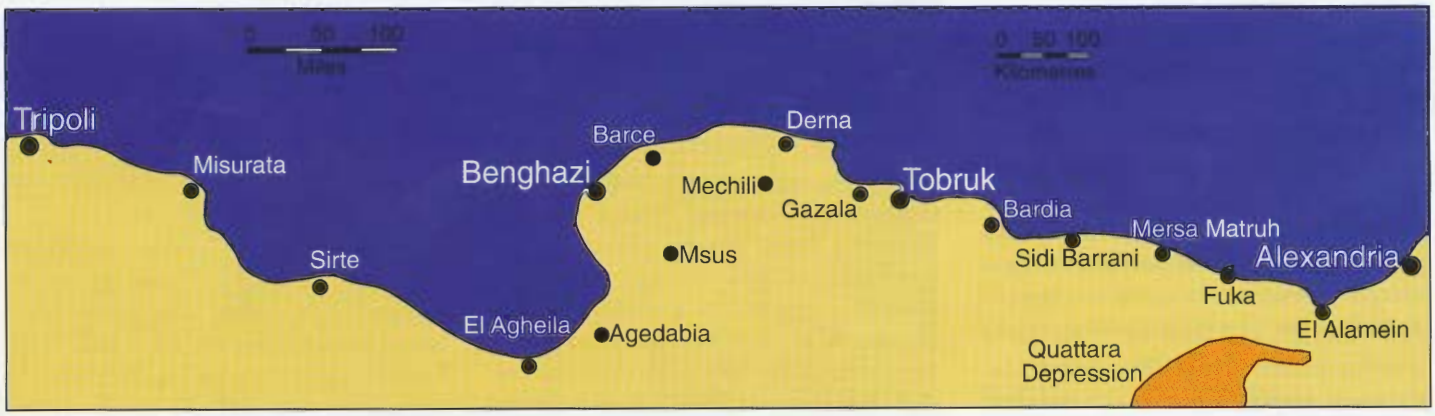
The safe and/or appropriate alternatives with O'Connor's armoured force reduced to fifty serviceable cruiser tanks would have been 1. to await supplies and reinforcements before continuing or 2. to advance in the wake of the Italians harrying at their rear.

This second alternative is what O'Connor wanted the Italians to think he was doing. The Australians attacked Italian forces at Derna on the coast road while 7th Armoured was preparing to cut across the Cyrenaicean bulge and intercept the retreating Italians.

To split one's forces in the face of a superior enemy, even such a demoralised one as the Italians were at this time has always been a risky manoeuvre and to judge when it will be successful is the mark of an above average commander.

Managing to set up a road block in the path of the retreating Italians the British were able to ambush huge columns of supply trucks which were the first enemy units to arrive.

As combat units arrived in front of the British positions they launched a series of unsuccessful assaults which became more and more desperate as the day



The Battleground
The western desert from Tripoli to Alexandria

wore on. With the Australians advancing rapidly along the coast road the Italian Tenth Army surrendered and the victory was complete. Once again O'Connor's response was to begin planning his next attack.

All that remained of the Italian Army in Libya were five weak divisions near Tripoli and the little General was convinced that he would be able to dispose of them with no more difficulty than he had the rest of the Italians.

On February 12 Rommel arrived in Tripoli. He later stated that "If Wavell had now continued his advance into Tripolitania no resistance worthy of the name could be mounted against him." But it was not to be, Churchill with his fixation on Greece decided to remove the bulk of O'Connor's force to participate in the ill-advised Greek Campaign.

The offensive was over and because of the decision to send troops to Greece the war in the desert was to go on for another two years. Most of O'Connor's men were sent to Greece and the few who remained were spread out in Cyrenaica in penny-packets.

When Rommel attacked at the end of March 1941 O'Connor was sent to the front to coordinate the defence but was captured by a German unit which had penetrated behind the fluid British lines.

It is a great pity that the world was never to see Rommel vs O'Connor because both these talented commanders would have been tested to their utmost.

Unlike Rommel, O'Connor never served under true adversity and as such he cannot be regarded as a great commander. We simply did not see enough of him to gain a full insight into his abilities.

O'Connor himself said that "I would never consider a commander completely successful until he had restored the situation after a serious defeat and a long retreat." However in his one campaign O'Connor made no mistakes and took full toll of the enemy's, 130,000 Italians ended up marching into captivity for the cost of only 1744 Commonwealth casualties.

The second of the five men who were to command the Commonwealth forces in the Western Desert was General Sir Alan Cunningham. Cunningham was well known for having defeated the Italians in Somaliland and Abyssinia and appeared to be a man, like O'Connor, of great energy and confidence.

In July 1941 after the piecemeal Corps actions of Brevity and Battleaxe Cunningham was brought in to command the new Eighth Army which was preparing for Operation Crusader, the first major offensive against the German led Axis forces. He had never commanded armour or any force greater than about two divisions.

Cunningham's lack of experience with tanks led him to form an armoured corps consisting almost entirely of tanks and an infantry corps with the infantry tanks. This followed one of the pre-war tank doctrines present in the British Army and was quite unlike the German practice of combined arms.

The above organisation forced Cunningham to seek out and win a decisive tank engagement which is precisely what he intended to do by swinging XXX Corps around the German front line defences and attacking towards besieged Tobruk.

The weakness of the plan was that there was no clear objective other than winning a tank battle. Rommel was to be allowed to recover from his initial shock while the British waited to see how he reacted.

Only after Rommel's intentions were known would the British be able to counter them. This shows the weakness of Cunningham's thinking. Whether you are an armoured commander or not the initiative is not meekly surrendered to the enemy at the start of an offensive.

From the beginning of Operation Crusader the armour was allowed to separate. 4th Brigade was left as flank protection for the infantry while 22nd Brigade went off attacking the Italian Ariete Division which soundly beat the overconfident British.

Cunningham

Cunningham kept on to Sidi Rezegh with one armoured brigade and actually believed the reports that the Germans were in full retreat. The Army was given orders to prepare a pursuit!

Unfortunately for Cunningham the movements which his intelligence had informed him of were the two German Panzer Divisions concentrating before attacking XXX Corps.

Cunningham now had his clash of armour but his faulty dispositions resulted in 7th Brigade being crushed before the other two brigades came up. Even then 4th and 22nd Armoured Brigades entered the fight separately and were defeated in detail.

It became clear to Cunningham on the morning of November 23, when Crusader had been under way for 5 days that he needed help. He called his superior Claude Auchinleck, C-in-C Middle East, asking him to fly to the front.

Cunningham had cracked and his subordinates realised it with a refusal to

Ritchie

obey orders that was little short of mutinous.

Auchinleck arrived in the evening of the 23rd and the change in direction was obvious. The battle would continue under Auchinleck whereas Cunningham had been thinking of a general retreat.

As Auchinleck surmised, Rommel had been hurt badly, he was down to 100 tanks but he had one last stroke which was designed to break the British commander's nerve. He led his remaining armour away from his central position onto the flank of XIII Corps, the infantry.

Against Cunningham, who had feared such a move, it would have worked. Against Auchinleck it didn't.

The flank of XIII Corps was simply refused and Rommel found himself out of supplies and forced to retreat.

The battle was saved but Cunningham could not remain. On November 26 Auchinleck dismissed his Eighth Army Commander.

The third commander of British forces in the Western Desert was Major-General Neil Ritchie. Ritchie was Auchinleck's chief of staff and he had the advantage of being on the spot and being relatively free so that his transfer would not upset the battle currently under way. The appointment was always intended to be temporary, Ritchie was too junior to expect a permanent command of this importance.

Initially there was little for the new Army commander to do. The Eighth Army was engaged in a series of dogfights over which neither commanding general had very little control.

Every battle was a German tactical victory but the sum of these victories was the weakening of Panzergruppe Afrika to such an extent that Rommel felt constrained to retreat from Cyrenaica. The British had won through greater reserves and sheer doggedness.

As Rommel retired west Auchinleck felt the need to hold Ritchie's hand in the latter's first tentative steps as an army commander. They soon found that pursuing the Germans was entirely different to O'Connor's experiences against the Italians.

Rommel had received forty new tanks and these were used in a savage counterattack which almost reduced the Eighth Army's tank numbers to nil. The advance halted and Rommel was permitted to take up new positions at El Agheila.

Once the fighting was over Auchinleck wanted to replace Ritchie with a permanent commander. However, this proved impossible as Churchill had publicly announced Ritchie as the new commander of the Eighth Army.

Now that Crusader had been won, however shakily, Ritchie was seen as the victor and could not be removed. Auchinleck did not insist on Ritchie's replacement, showing up his one major flaw, poor choice of subordinates and an inability to be as ruthless in weeding out incompetents as was required.

Rommel should have spent the next few months rebuilding his army but then the "Desert Fox" was not your typical General.

On January 21 Panzergruppe Afrika attacked. The raw 1st Armoured Division was in the forefront of the British positions and it crumpled under the pressure. Ritchie refused to contemplate that this was anything more than a reconnaissance in force and consequently failed to react in a proper manner.

By the time Ritchie had realised what Rommel was up to 1st Armoured Division had only barely escaped being pocketed and was in a rout towards Benghazi.

Rommel moved up to Msus, feinted towards Mechili and then dashed through the gap between 1st Armoured and 4th Indian Divisions trapping the latter on the coast near Benghazi.

4th Indian Division broke out of the trap before it was solidly shut but this did not change the fact that Ritchie was taken completely off guard and was consistently at least two steps behind Rommel.

Once again Auchinleck considered Ritchie's future as commander of the Eighth Army and once again he could not bring himself to sack this loyal and amiable man.

In position at Gazala Ritchie began to lay out a series of defences which were disturbingly reminiscent of the Italian fortified camps which O'Connor had destroyed all those months ago.

The system of "boxes" ran from Gazala on the coast to Bir Hacheim well inland. Each box contained an infantry brigade plus guns and was linked to the other boxes by deep minefields.

It was a defensive technique which had been shown to be useless in the desert but Ritchie treated his boxes as some sort of miracle which solved the problems faced by infantry in desert warfare.

To add to Ritchie's mistakes the two armoured divisions were strung out south of Tobruk such that any advance around the southern flank of the British defences would contact each brigade in succession.

Continued on p. 40

Omdurman

The Downfall of Mahdism

September 2nd, 1898

A Scenario for the Decisive Battles Game System

by Steven Ford

The drama which unfolded around Egypt and the Sudan at the close of the nineteenth century was the apotheosis of the late Victorian colonial epic. Clearly defined heroes and villains arose. Awful tragedy struck. The machinations and the dead hand of the politician came starkly into view. Splendid armies marched, although for the most part soldiers sat idle for months at a time, and when the whole affair seemed almost concluded a backwater incident brought the world's two greatest colonial powers to the brink of war.

Britain's intimate involvement with Egypt, which would last until the Suez crisis, began when a young Napoleon Bonaparte invaded the land of the Pharaohs in 1798. Potential existed for an overland expedition which could pose a serious threat to India, the jewel in Britain's imperial crown. Up until this time British global naval supremacy had rendered India virtually unassailable.

Suddenly Malta, the Eastern Mediterranean and Egypt assumed vital strategic importance. Egypt at this time was part of the decaying Ottoman Empire. The Turkish Sultan appointed viceroys, the first of which, Mohammed Ali (No relation to the boxer) established a pattern of virtual autonomy from the Sultan.

Despite the demise of Napoleon there was no lessening of the importance of Egypt. One Lieutenant Waghorn, a British officer, organised the first overland route between the Mediterranean and the Red Sea.

Ships from Britain unloaded passengers and cargo in Alexandria whereupon Waghorn's river boats and pack animals ferried all to Suez. Waiting vessels then completed the journey to Bombay. Bypassing the Cape of Good Hope shortened the journey to India by four weeks.

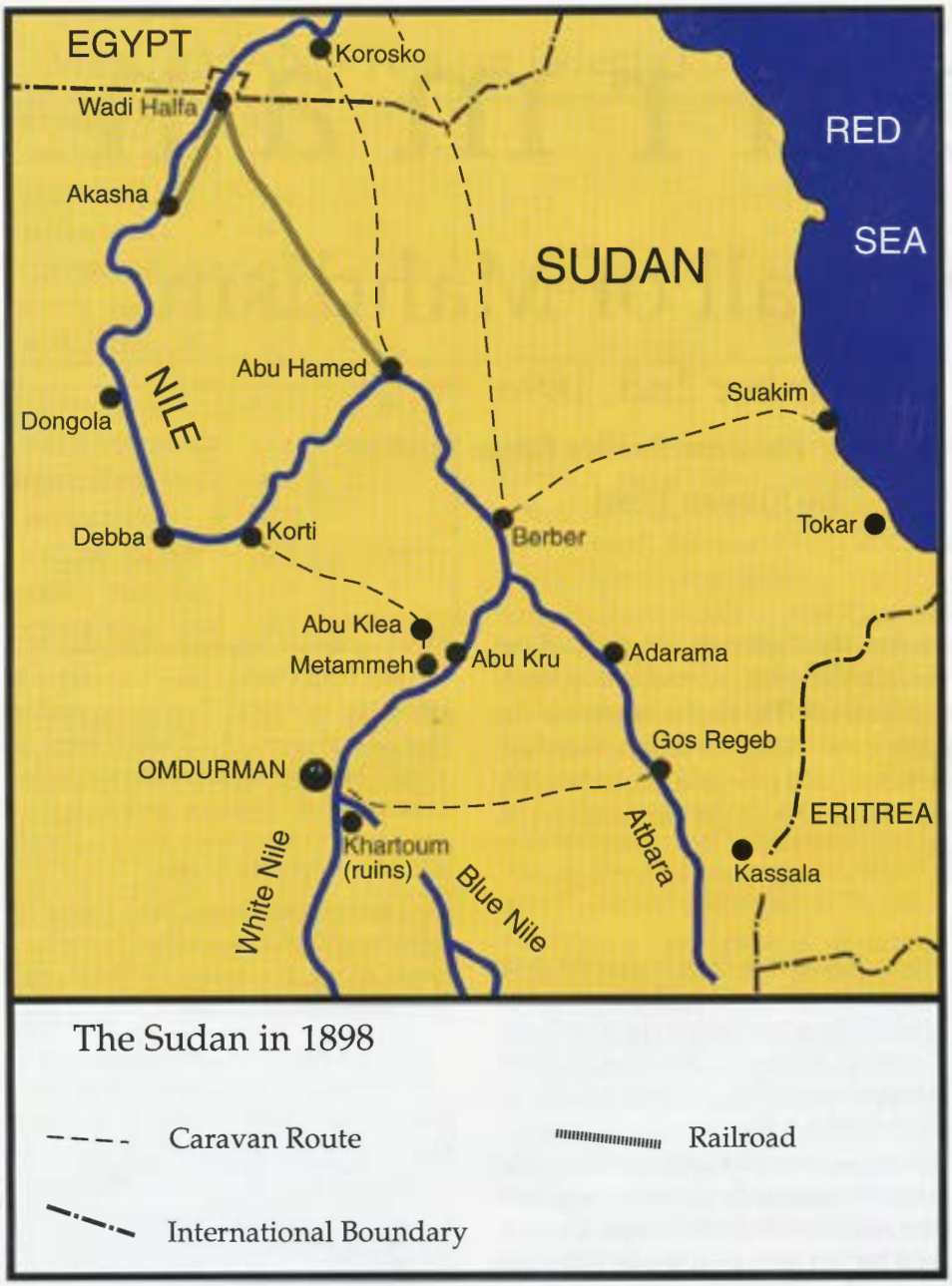
Elsewhere the plot was thickening. In 1821 Mohammed Ali cast an envious eye south towards the Sudan, a hostile and barren land peopled by tribal natives. The country was forcibly occupied and garrisons were established to enforce Egyptian colonial rule. For Egypt this proved to be a source of vast wealth. However a heavy price was paid by the Sudanese.

The Sudan was opened up to arab slavers who simply harvested the black population like a cash crop. During this period many Sudanese tribes ceased to exist. The Egyptian administration was brutal while corruption amongst officials was rampant. Taxes were unbearably high and the life of the local population was commensurately miserable.

In 1854 Britain, allied with France and Turkey, was fighting in the Crimea. In Cairo a new viceroy occupied the throne, Said Pasha. Said was eager to curry the favour of Europe so traders and adventurers of all forms were invited. One of these, a Frenchman named Ferdinand de Lesseps was to have a profound influence on Egypt, Britain and ultimately the Sudan.

De Lesseps petitioned Said Pasha for permission and resources to build a canal along the route of Waghorn's overland caravans connecting the east-

The Mahdi
Religious fanatic, skilful politician and Sudanese patriot



ern Mediterranean to Suez on the Red Sea. the logic was that the journey to India would be shortened even more.

The British naturally were galled by the thought of a Franco-Egyptian canal threatening India. However since France and Britain were brothers in arms against the Russians it was virtually impossible for diplomatic pressure to be brought to bear against the project. Consequently Said Pasha awarded De Lesseps large tracts of land, free labour and mineral rights. The digging of the Suez Canal commenced.

It is not within the scope of this article to detail the fortunes of the canal's construction. Suffice to say that on the 17th November, 1869 the vaunted canal was eventually opened.

The most notable development in the intervening years was the desperate financial straits in which Egypt was foundering. In 1841 the national debt stood at £3.25 million. By 1876 this deficit had ballooned to the impossible figure of £94 million. The debt was owed to European powers, predominantly Britain and France.

This situation wasn't helped by the new viceroy Ismail Pasha purchasing the title of Khedive from the Sultan of Turkey. The cost to Egypt of changing the brass plaque and office stationary was a cool £1 million (apparently quite a bargain).

Meanwhile, and ironically, most of the shipping using the new Suez Canal was British. Benjamin Disraeli was determined that since Britain couldn't prevent the construction of this piece of engineering then she would certainly control it.

It seemed that Britannia would still rule the waves even if some of those waves amounted to ripples on a glorified drainage ditch running across a barren wilderness.

In 1875 Disraeli entered into clandestine negotiations with the Rothschild banking family to borrow £4 million with which to purchase the Egyptian Khedive's shares in the canal representing 44% of the total. The scheme was a success.

Disraeli had narrowly beaten De Lesseps to the march. De Lesseps acting as an agent for the French Government was also planning to pay handsomely for the Khedive's shares. The consequences of French control of the canal were unthinkable in Britain and the coup was hailed as one of the great successes of Disraeli's administration. It also meant that Britain was now inextricably bound to the affairs of Egypt.

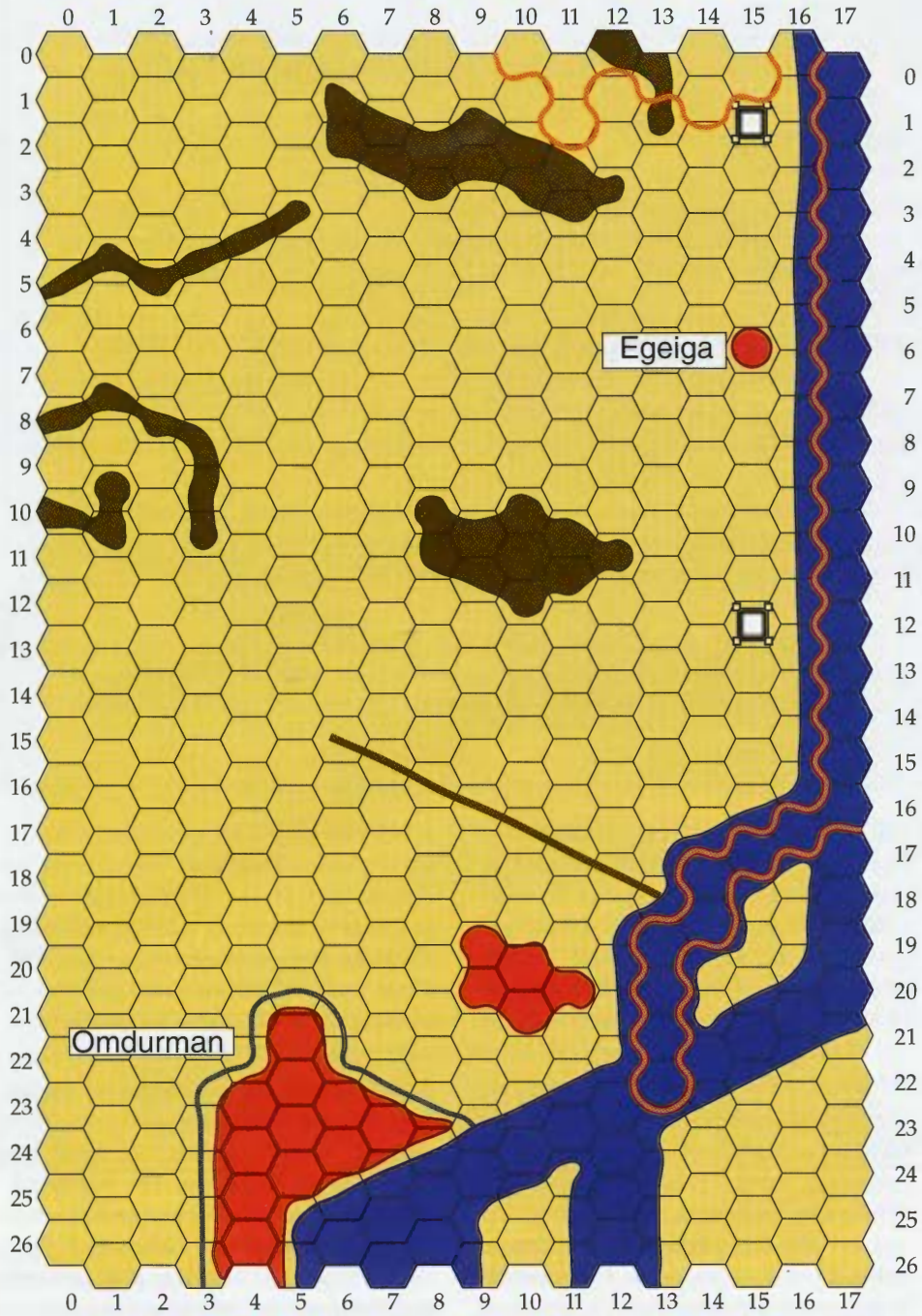
In 1876 Egypt's capacity to repay her debts was exhausted. Bankrupt, she suspended payments of interest and debts. Britain and France who stood to lose the most brought Ismail Pasha to heel by imposing a 'Commission of Debt' (In modern parlance they wheeled in the receivers).

The reality of all this was that the two European powers exercised dual control of Egyptian affairs. In 1879 Ismail Pasha led a doomed revolt which resulted in his relinquishing the nominal seat of power in favour of his son Tewfik.

Enter the Mahdi

Although neither France nor Britain anticipated an escalation of their military presence in Egypt the fact of the

OMDURMAN - Map



Suez Canal meant that any threat to Egypt was a direct threat to Britain.

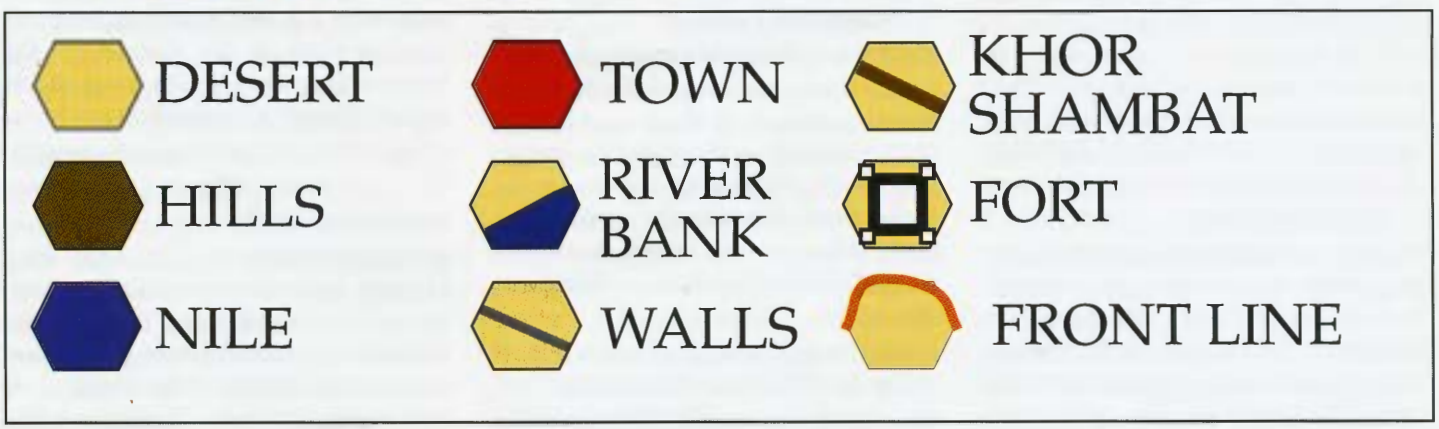
By the end of the 1870s the Sudan was ripe for trouble. The Turco-Egyptian administration was wholly corrupt while being at the same time stricken with financial difficulties, foreign intervention, disaffection of the military and a general apathy. The whole region was a powder keg with a short fuse. In 1881 the match was struck.

Mohammed Ahmed Ibn Al-Sayid Abdullah was born the son of a carpenter (some sources say his father was a boat builder and does it really matter?) Instead of joining the family trade the young Mohammed Abdullah chose religion as his vocation becoming a *shaykh* of the Sammaniya order of Islam.

From his early twenties onwards he travelled extensively throughout the Sudan on religious missions. Clearly he must have witnessed first hand the depredations of the Egyptian administration. Somewhere around 1881 at the age of 37 he came to the realisation that he was the 'Mahdi' (literally translated 'The expected one') an islamic messiah.

The beginnings of the Mahdi's popular uprising were modest. When he proclaimed a *hirja* (the flight of the Fáith from amongst the infidels to him) in the summer of 1881 only a handful of fanatics joined him.

It's worth noting that Mahdism is actually an Islamic heresy. In Christian parlance it is the same as declaring that



The Siege of El Obeid.

In October 1881 and again in May 1882 the Egyptians mounted two relatively small expeditions to apprehend the Mahdi. Both met with disaster at the hands of men armed only with traditional weapons, swords, spears and knives. The Mahdi had forbidden the use of any of the 'Infidels' modern weapons despite the capture of many Egyptian Remington rifles.

Buoyed by these victories the Mahdi began to take the offensive. He now controlled virtually all of the province of Kordofan except for the provincial capital of El Obeid.

On September 1, 1881 the Mahdi offered the provincial governor, Muhammad Said the chance to surrender. The town was secured by walls twenty feet thick and garrisoned by 6,000 Egyptian regulars. The larder was well stocked and there was a reasonable chance of holding out for some months. Muhammad Said therefore summarily hanged the Mahdi's emissaries and the die was cast.

The Mahdi's opening gambit on 8 September was a direct, frontal human-wave assault with predictable results.

To that time the Egyptians had always been surprised in the open. El Obeid was different and the disciplined fire from modern rifles at close range was devastating. Mahdist losses were extreme. This was an acute embarrassment to the Mahdi who until then had assured his followers that the infidels' bullets would not kill them. (How wrong can someone be ?)

Losses were so high that he quickly rescinded his prohibition on modern weapons and allowed his troops to use the captured Egyptian rifles. Despite this his army was still deficient in firepower adequate to storming a heavily fortified town. So he resolved to starve the defenders in a conventional siege. That same month an Egyptian relief force of 3,000 was systematically annihilated.

After nearly five months El Obeid fell on 17, January 1883. The Governor and all high ranking Egyptians were killed and the surviving troops were forced to serve the Mahdi. However it was a signal lesson which the Mahdists eventually forgot. Men armed only with spears, advancing in the open in close order, are no match for steady troops with modern firearms and secure flanks.

you are actually Christ returned. Had the Governor General of the Sudan, Rauf Pasha chosen to ignore the Mahdi perhaps he would have faded into obscurity. However, an impetuous Egyptian officer, Aby Su 'ud, with two companies of regulars was dispatched to take the Mahdi by force.

Su 'ud should have been successful. The Mahdi had only 313 men armed with traditional weapons. The Mahdi subsequently made much of this fact since it was the same number of men with which the Prophet Mohammed supposedly won his first battle.

Each of Su 'ud's junior officers were eager to be the one to capture the Mahdi since it guaranteed a promotion. In their efforts to get to him first they became separated during a hurried night march. The Mahdists ambushed and destroyed them in detail for a loss of only twelve men.

The plot was now well and truly thickening. The victory was seen as a miracle reinforcing the Mahdi's claims. He became the rallying point for all Sudanese eager to resist the Egyptians. Thousands flocked to his banner. By mid 1882 his army had annihilated two Egyptian punitive expeditions and he commanded 50,000 troops. In January 1883 El Obeid, the capital of the central province of Kordofan fell to the Mahdists. Everything south and west of Khartoum was either controlled or isolated by the Mahdi. For Cairo the situation was now critical.

The Egyptian response to a threat as virulent as Mahdism was slow, almost catatonic, but this is hardly surprising. While the Sudanese were rising up against the Egyptians the Egyptians were, at almost the same time, rebelling against the dual control exercised by Britain and France.

The Egyptian populace resented Anglo-French interference especially the hated 'Commissioners of Debt' and late in 1881 a colonel in the Egyptian army, Arabi Pasha, was swept to prominence at the head of a popular uprising to oust the European overlords. Both Britain and France dispatched warships to the region.

Arabi Pasha refused to succumb to 'Gunboat Diplomacy' and fortified the Harbour at Alexandria threatening the European ships. An ultimatum was issued demanding that these forts be dismantled. It was ignored. Just as the moment of decision was approaching the French government changed. Her ships were withdrawn and the task of putting down the rebellion fell to Britain alone.

At 7A.M. on July 11, 1882, one month after issuing their ultimatum the British navy began bombarding Arabi Pasha's Alexandria forts. The bombardment was inconclusive and ended when both ship and shore exhausted their ammunition. Alexandria was secured and the shore batteries finally silenced only after a party of bluejackets and marines went in and cleared out the rebels at the point of the bayonet, shooting and hanging looters in the process.

Arabi Pasha however still controlled Cairo and much of Egypt with an army numbering 60,000.

In Britain things had changed also. Disraeli was out and Gladstone was now prime minister of a 'Liberal' government opposed to foreign military adventures. Despite this it was clear that diplomacy could do no more. The

only way to secure Egypt was to dispatch an army and defeat Arabi Pasha in the field. Britain's 'Only General' Sir Garnet Wolseley led the campaign which, fortunately for Gladstone, met with outstanding success.

On 13 September 1882 the Egyptian forces were beaten decisively at Tel El Kebir and the rebellion was ended. Arabi Pasha was banished to Ceylon. In Egypt he remained a national hero and was eventually pardoned in 1901.

In true colonialist fashion it was anticipated that Britain would simply annex Egypt. However Gladstone, liberal that he was, would have none of it. Egypt was still under Ottoman suzerainty and the position of Khedive would be restored.

Wolseley's forces were retained as a virtual army of occupation and the commissioners of debt remained until 1883 when Evelyn Baring was appointed Consul General. Baring, who later earned the title of 'Lord Cromer', was to exercise total control over Egypt for nearly 30 years. He immediately instituted much needed reforms. The most important of which was the reconstruction, under British tutelage, of the Egyptian army.

Despite Gladstone's declarations that the British occupation would be short it was apparent that only a radical and long-term reform of the Egyptian administrative infrastructure could guarantee the security of the Suez Canal and European interests in general. Added to this was the heightening of colonial tensions between Britain and France now that the Union Jack flew over the Canal and the Nile.

It is ironic that while Arabi Pasha was fighting for Egyptian freedom the new Governor General of the Sudan, Abd el Kader was trying desperately to maintain Egyptian domination over his jurisdiction. An itinerant British officer, Colonel William Hicks, was appointed chief of staff of the Egyptian forces in the Sudan.

Cairo and the British would not commit the newly reformed Egyptian army to any activity outside Egypt proper so no meaningful support was sent to Hicks.

Gordon of Khartoum
In his last months Gordon would often stand on a rooftop scanning the horizon for the relief column. It never came

After an initial victory over the mahdists at Jebel Ain Hicks set off for El Obeid with a force of 8,000 troops of questionable worth. After two long dry months the expedition ended in disaster. Hicks reportedly died valiantly as his 8,000 were overwhelmed by the entire mahdist army numbering almost 60,000.

Egyptian fortunes in the Sudan continued to decline. While Khartoum's attention was fixed on Kordofan the natives were literally 'becoming restless' on the other side of the Nile. A trade route stretched from Suakin on the Red Sea to Berber on the Nile, north of Khartoum. It crossed the land of the Hadenowa tribesmen. These were the famous 'fuzzy wuzzies' who gained notoriety in Kipling's poetry and 'The Four Feathers'.

They were led by the very able Osman Diqna. After the fall of El Obeid he swore allegiance to the Mahdi and would remain faithful to the end of Mahdism. Egyptian control of the Sudan stopped at Khartoum and the Nile. The capital itself was now nearly surrounded on three sides by Mahdist controlled territory and the provinces of Equatoria and Darfur were each isolated and could offer no mutual support.

OMDURMAN - Brigades

UNIT NUMBER	1-127	1	2	3	4	5	6	7	8	9	10	11
UNIT I.D. (Full)	[9]	Khalifa's	Steamers	Wakil	Mahdist	Mahdist	Diqna	Diqna	Diqna	Diqna	Diqna	Diqna
UNIT I.D. (Abbr)	[3]	Kha	Ste	Wak	Mah	Mg	Diq	Diq	Diq	Diq	Diq	Diq
UNIT SIZE	[3]	Bde	Bty	Bde	Bty	Bty	Bde	Bde	Bde	Bde	Bde	Bde
MAP LOCATION	(x,y)	6,22	11,23	7,17	4,9	7,22	1,19	2,18	2,21	3,20	2,19	2,20
CORPS	0-15	0	0	0	0	0	1	1	1	1	1	1
DIVISION	0-39	0	0	0	0	0	0	0	0	0	0	0
ARRIVAL	0-95	0	0	0	0	0	0	0	0	0	0	0
UNIT TYPE	0-3	0	3	2	3	3	0	0	0	0	0	0
OBJECTIVE	0-23	5	8	7	4	4	0	0	0	0	0	0
SMALL ARMS	0-31	3	3	5	3	4	4	4	4	4	4	4
ARTILLERY	0-31	0	1	0	1	4	0	0	0	0	0	0
TROOP STREN.	0-31	10	3	3	5	2	10	10	10	10	10	10
MOVEMENT	0-15	5	7	9	0	0	5	5	5	5	5	5
BATTERY STR.	0-15	0	1	0	7	2	0	0	0	0	0	0
SHATTERED	0-1	0	0	0	0	0	0	0	0	0	0	0
LEADERSHIP	0-7	3	5	5	5	4	4	4	4	4	4	4
COHESION	0-7	7	7	7	7	7	7	7	7	7	7	7
EXPERIENCE	0-7	7	5	5	4	4	5	5	5	5	5	5
REGIMENTS	0-7	0	2	3	3	2	0	0	0	0	0	0
LIKELIHOOD	0-7	7	7	7	7	7	7	7	7	7	7	7

UNIT NUMBER	1-127	12	13	14	15	16	17	18	19	20	21	22
UNIT I.D. (Full)	[9]	Diqna	Fort Arty	Fort Arty	Al Din	Al Din	Al Din	Al Din	Al Din	Al Din	Al Din	Al Din
UNIT I.D. (Abbr)	[3]	Diq	Art	Art	Din	Din	Din	Din	Din	Din	Din	Din
UNIT SIZE	[3]	Bde	Bty	Bty	Bde	Bde	Bde	Bde	Bde	Bde	Bde	Bde
MAP LOCATION	(x,y)	3,19	15,1	15, 12	0,20	1,21	1,20	0,22	1,22	0,21	0,23	1,23
CORPS	0-15	1	0	0	0	0	0	0	0	0	0	0
DIVISION	0-39	0	0	0	1	1	1	1	1	1	1	1
ARRIVAL	0-95	0	0	0	0	0	0	0	0	0	0	0
UNIT TYPE	0-3	0	3	3	0	0	0	0	0	0	0	0
OBJECTIVE	0-23	0	0	0	0	0	0	0	0	0	0	0
SMALL ARMS	0-31	4	3	3	3	3	3	4	3	3	3	3
ARTILLERY	0-31	0	1	2	0	0	0	0	0	0	0	0
TROOP STREN.	0-31	10	3	3	10	10	10	10	10	10	10	10
MOVEMENT	0-15	5	0	0	5	5	5	5	5	5	5	5
BATTERY STR.	0-15	0	3	2	0	0	0	0	0	0	0	0
SHATTERED	0-1	0	0	0	0	0	0	0	0	0	0	0
LEADERSHIP	0-7	4	4	5	4	4	4	4	4	4	4	4
COHESION	0-7	7	7	7	7	7	7	7	7	7	7	7
EXPERIENCE	0-7	5	4	4	4	4	4	4	4	4	4	4
REGIMENTS	0-7	0	2	2	0	0	0	0	0	0	0	0
LIKELIHOOD	0-7	7	7	7	7	7	7	7	7	7	7	7

UNIT NUMBER	1-127	23	24	25	26	27	28	29	30	31	32	33
UNIT I.D. (Full)	[9]	Al Din	Al Din	Azraq	Azraq	Azraq	Azraq	Azraq	Azraq	Azraq	Azraq	Siwar
UNIT I.D. (Abbr)	[3]	Din	Din	Azr	Azr	Azr	Azr	Azr	Azr	Azr	Azr	Siw
UNIT SIZE	[3]	Bde	Bde	Bde	Bde	Bde	Bde	Bde	Bde	Bde	Bde	Bde
MAP LOCATION	(x,y)	2,22	2,23	4,18	5,18	4,19	5,19	3,17	3,18	6,19	6,20	2,17
CORPS	0-15	0	0	0	0	0	0	0	0	0	0	0
DIVISION	0-39	1	1	2	2	2	2	2	2	2	2	3
ARRIVAL	0-95	0	0	0	0	0	0	0	0	0	0	0
UNIT TYPE	0-3	0	0	0	0	0	0	0	0	0	0	0
OBJECTIVE	0-23	0	0	0	0	0	0	0	0	0	0	0
SMALL ARMS	0-31	3	3	4	4	4	4	4	4	4	4	4
ARTILLERY	0-31	0	0	0	0	0	0	0	0	0	0	0
TROOP STREN.	0-31	10	10	10	10	10	10	10	10	10	10	12
MOVEMENT	0-15	5	5	5	5	5	5	5	5	5	5	5
BATTERY STR.	0-15	0	0	0	0	0	0	0	0	0	0	0
SHATTERED	0-1	0	0	0	0	0	0	0	0	0	0	0
LEADERSHIP	0-7	4	4	3	3	3	3	3	3	3	3	4
COHESION	0-7	7	7	7	7	7	7	7	7	7	7	7
EXPERIENCE	0-7	4	4	4	4	4	4	4	4	4	4	4
REGIMENTS	0-7	0	0	0	0	0	0	0	0	0	0	0
LIKELIHOOD	0-7	7	7	7	7	7	7	7	7	7	7	7

Brigades (Cont.)

UNIT NUMBER	1-127	34	35	36	37	38	39	40	41	42	43	44
UNIT I.D. (Full)	[9]	Siwar	Yaqub	Yaqub	Yaqub	Yaqub	Yaqub	Yaqub	Yaqub	Yaqub	Yaqub	Yaqub
UNIT I.D. (Abbr)	[3]	Siw	Yaq	Yaq	Yaq	Yaq	Yaq	Yaq	Yaq	Yaq	Yaq	Yaq
UNIT SIZE	[3]	Bde	Bde	Bde	Bde	Bde	Bde	Bde	Bde	Bde	Bde	Bde
MAP LOCATION	(x,y)	2,16	1,14	0,16	0,17	0,18	0,15	1,16	0,14	1,18	1,15	2,14
CORPS	0-15	0	0	0	0	0	0	0	0	0	0	0
DIVISION	0-39	3	4	4	4	4	4	4	4	4	4	4
ARRIVAL	0-95	0	0	0	0	0	0	0	0	0	0	0
UNIT TYPE	0-3	0	0	0	0	0	0	0	0	0	0	0
OBJECTIVE	0-23	0	0	0	0	0	0	0	0	0	0	0
SMALL ARMS	0-31	4	4	4	4	4	4	4	4	4	4	4
ARTILLERY	0-31	0	0	0	0	0	0	0	0	0	0	0
TROOP STREN.	0-31	12	10	10	10	10	10	10	10	10	10	10
MOVEMENT	0-15	5	5	5	5	5	5	5	5	5	5	5
BATTERY STR.	0-15	0	0	0	0	0	0	0	0	0	0	0
SHATTERED	0-1	0	0	0	0	0	0	0	0	0	0	0
LEADERSHIP	0-7	4	4	4	4	4	4	4	4	4	4	4
COHESION	0-7	7	7	7	7	7	7	7	7	7	7	7
EXPERIENCE	0-7	4	4	4	4	4	4	4	4	4	4	4
REGIMENTS	0-7	0	0	0	0	0	0	0	0	0	0	0
LIKELIHOOD	0-7	7	7	7	7	7	7	7	7	7	7	7

UNIT NUMBER	1-127	45	46	47	48	49	50	51	52	81	82	83
UNIT I.D. (Full)	[9]	Yaqub	Yaqub	Kara	Kara	Helu	Helu	Helu	Helu	War/Cam	Sea/Lin	R.B./Lan
UNIT I.D. (Abbr)	[3]	Yaq	Yaq	Kar	Kar	Hel	Hel	Hel	Hel	War	Sea	R.B
UNIT SIZE	[3]	Bde	Bde	Bde	Bde	Bde	Bde	Bde	Bde	Bde	Bde	Bde
MAP LOCATION	(x,y)	1,17	0,19	8,23	5,20	1,10	1,13	1,12	1,11	12,0	13,0	14,1
CORPS	0-15	0	0	0	0	0	0	0	0	0	0	0
DIVISION	0-39	4	4	5	5	6	6	6	6	9	9	10
ARRIVAL	0-95	0	0	0	0	0	0	0	0	0	0	0
UNIT TYPE	0-3	0	0	0	0	0	0	0	0	0	0	0
OBJECTIVE	0-23	0	0	0	0	0	0	0	0	1	1	1
SMALL ARMS	0-31	4	4	4	3	4	4	4	4	1	1	1
ARTILLERY	0-31	0	0	0	0	0	0	0	0	5	5	5
TROOP STREN.	0-31	10	10	12	12	10	10	10	10	20	20	20
MOVEMENT	0-15	5	5	5	5	5	5	5	5	4	4	4
BATTERY STR.	0-15	0	0	0	0	0	0	0	0	2	2	2
SHATTERED	0-1	0	0	0	0	0	0	0	0	0	0	0
LEADERSHIP	0-7	4	4	4	4	4	3	4	3	6	6	6
COHESION	0-7	7	7	7	7	7	7	7	7	7	7	7
EXPERIENCE	0-7	4	4	4	4	4	4	4	4	7	7	7
REGIMENTS	0-7	0	0	0	0	0	0	0	0	7	7	7
LIKELIHOOD	0-7	7	7	7	7	7	7	7	7	7	7	7

UNIT NUMBER	1-127	84	85	86	87	88	89	90	91	92	93	94
UNIT I.D. (Full)	[9]	Gre/Nor	13/14 Su	8/12/E&S	9/10 Su	2/11/E&S	3/4 Egypt	7/15 Egypt	1/5 Egypt	6/16 Egypt	Maxim A	Maxim B
UNIT I.D. (Abbr)	[3]	Gds	13S	8E	10S	2E	3E	7E	1E	6E	MGA	MGB
UNIT SIZE	[3]	Bde	Bde	Bde	Bde	Bde	Bde	Bde	Bde	Bde	Bty	Bty
MAP LOCATION	(x,y)	15,0	12,0	13,0	14,0	15,0	12,0	13,1	14,1	15,0	13,0	14,0
CORPS	0-15	0	0	0	0	0	0	0	0	0	2	3
DIVISION	0-39	10	11	11	12	12	13	13	14	14	0	0
ARRIVAL	0-95	0	2	2	2	2	3	3	3	3	3	3
UNIT TYPE	0-3	0	0	0	0	0	0	0	0	0	3	3
OBJECTIVE	0-23	1	0	0	0	0	0	0	0	0	7	7
SMALL ARMS	0-31	1	2	2	2	2	2	2	2	2	1	1
ARTILLERY	0-31	5	5	5	5	5	5	5	5	5	7	7
TROOP STREN.	0-31	20	20	20	20	20	20	20	20	20	2	2
MOVEMENT	0-15	4	4	4	4	4	4	4	4	4	5	5
BATTERY STR.	0-15	2	2	2	2	2	2	2	2	1	5	5
SHATTERED	0-1	0	0	0	0	0	0	0	0	0	0	0
LEADERSHIP	0-7	6	6	6	6	6	6	6	6	6	7	7
COHESION	0-7	7	7	7	7	7	7	7	7	7	7	7
EXPERIENCE	0-7	7	4	4	4	4	4	4	4	4	7	7
REGIMENTS	0-7	7	4	4	4	4	4	4	4	4	7	7
LIKELIHOOD	0-7	7	7	7	7	7	7	7	7	7	7	7

Brigades - (Cont.)

UNIT NUMBER	1-127	95	96	97	98	99	100	101	102	103
UNIT I.D. (Full)	[9]	Gunboat B	Gunboat E	21 Lancer	Camel Cps	Howitzer	Egt Cav-A	Egt Cav-B	Egt Cav-C	32 F.A.
UNIT I.D. (Abbr)	[3]	GnB	GnE	21L	Cam	How	EcA	EcB	EcC	32A
UNIT SIZE	[3]	Bty	Bty	Rgt	Cps	Bty	Bde	Bde	Bde	Bty
MAP LOCATION	(x,y)	17,1	17,6	11,1	10,0	13, 23	6, 0	7,0	8,0	15,0
CORPS	0-15	0	0	0	0	0	0	0	0	0
DIVISION	0-39	0	0	0	15	0	16	16	16	0
ARRIVAL	0-95	0	0	3	2	9	2	2	2	3
UNIT TYPE	0-3	3	3	2	1	3	2	2	2	3
OBJECTIVE	0-23	9	9	1	7	0	7	7	7	7
SMALL ARMS	0-31	6	6	7	1	1	2	2	2	1
ARTILLERY	0-31	5	5	0	0	8	0	0	0	6
TROOP STREN.	0-31	25	25	5	10	10	5	5	5	2
MOVEMENT	0-15	9	9	7	6	0	7	7	7	4
BATTERY STR.	0-15	15	15	0	0	10	0	0	0	1
SHATTERED	0-1	0	0	0	0	0	0	0	0	0
LEADERSHIP	0-7	7	7	3	6	7	5	5	5	7
COHESION	0-7	7	7	7	7	7	7	7	7	7
EXPERIENCE	0-7	7	7	4	7	7	4	4	4	7
REGIMENTS	0-7	7	7	3	6	7	3	3	3	7
LIKELIHOOD	0-7	7	7	7	7	7	7	7	7	7

OMDURMAN - Corps

CORPS NUM.	1-39	1	2	3
CORPS I.D.	[9]	U Diqna	Gatacre	Hunter
MAP LOCATION	(x,y)	5, 23	13, 0	14, 0
TYPE	0-1	0	0	0
ARRIVAL	0-95	0	3	3
ORDER	0-2	0	0	0
OBJECTIVE #1	0-23	6	4	3
OBJECTIVE #2	0-23	7	5	5
MOVEMENT	0-15	6	6	6
DAILY COMM.	0-15	0	0	0
LEADERSHIP	0-7	5	6	5
STAFF	0-7	3	6	5
STRENGTH	0-7	1	0	0
LIKELIHOOD	0-7	7	7	7

Gordon to the rescue

In London Gladstone's government was under extreme pressure to do something about the strife in the Sudan. He was caught between a rock and a hard place. Strategically he could not allow the growing trouble in the Sudan, which had reached the shores of the Red Sea, to threaten the Suez Canal. Morally and politically however, his Liberal government was opposed to sending British armies on foreign adventures.

Gladstone had no wish to attract the odium of sending a British expeditionary force up the Nile to help Egypt maintain its corrupt and morally indefensible domination of a weaker neighbour. Still Egypt was in no position to control the Mahdi without outside help. Her plight was further worsened by the fact that the 'new' Egyptian army, trained and officered by the British, was also forbidden by London to be sent to the Sudan.

The British proposed that Egypt abandon the Sudan and would only offer assistance to achieve that end. Faced with further humiliation the Egyptian government resigned to be replaced by a ministry more amenable to British desires. All Egyptian garrisons in the Sudan were to be evacuated, including, and most important of all, the capital Khartoum.

Having somewhat clarified Britain's position Gladstone still had to offer some form of assistance to the beleaguered Egyptians. It was with this backdrop that Major General Charles

Wolseley and Tel El Kebir.

In putting down the revolt of Arabi Pasha Sir Garnet Wolseley conducted a campaign worthy of 'Stormin' Norman' Schwarzkopf. Firstly he made excellent use of one of his most valuable assets, the press corps attached to his command. In various press conferences he let it be known that he intended to land at Aboukir Bay on August 19, thus securing Alexandria and outflanking the Egyptian lines at Kafr ed Dauar, prior to an advance on Cairo.

Wolesley actually bypassed Aboukir sailing right around the Nile delta past Port Said and down the Suez canal to Ismailia. By the evening of August 23 the bulk of the British forces were ashore and had secured Nefisha on the sweetwater canal. Arabi was surprised by the unexpected direction of Wolseley's advance and hurriedly reinforced his lines at Tel el Kebir to bar the way to the capital.

As was usually the case European armies operating in distant theatres were generally outnumbered significantly and this campaign was no exception. On 28 August , in a preliminary to the main event, the British advance guard of 2000 men drove back an attack by an Egyptian force five times their number at Mahsama.

Despite having landed his army without opposition Wolseley was still faced with the proposition of assaulting Arabi's heavily fortified position at Tel el Kebir. He entertained no illusions about the gravity of the situation and the Egyptian position was formidable indeed. Fortified lines, with the right flank secured by the sweetwater canal and the Wady Tumilat, were manned by 25,000 Egyptians supported by approximately 70 field guns including some modern Krupp breechloaders. The British would be compelled to approach these works across open desert devoid of any natural cover.

Wolseley commissioned a four day intensive reconnoitring of the Egyptian position prior to the inevitable assault. Mercifully, a weakness was found. The Egyptians left their outposts unmanned at night. Wolseley opted for a night approach march followed by a swift dawn assault.

Marching an army across the desert in darkness was risky but the alternative was far worse.

Wolseley allowed for a rate of march of only one mile per hour so his troops set off at 1.30 in the morning of 12 September. The march was not without incident. Royal engineers had placed directing poles in the sand but in the dark they proved useless. Then a group of staff riders were mistaken for arabs however no shots were fired.

In the centre of the line the Highland regiment rested for twenty minutes. Due to the slowness of passing orders by word of mouth the flanks continued to advance. By the time they were brought to a halt the British line resembled a large crescent. Both flanks had advanced such that they were actually facing each other. If they had mistaken each other for the enemy it could have proved disastrous. Fortunately for Wolseley all remained quiet and the lines were redressed in good order.

The Egyptian pickets were greeted at dawn by the sight of the British, with bayonets fixed, drawn up in line of battle and right at their throats. The assault was a complete success. The Egyptians were totally shattered at a cost of only 399 casualties amongst the British. The road to Cairo was open and the following day Arabi Pasha surrendered. The Suez canal was secure and the rebellion quashed.

If nothing else Wolseley's approach march proved the worth of all those mindless hours of Aldershot parade ground drill.

George Gordon C.B. was suggested as the man to lead the evacuation of the Sudan despite strong objections from Evelyn Baring, Britain's senior representative in Cairo. Baring felt it unwise to appoint Gordon, a Christian, to supervise activities which involved entirely Islamic peoples.

To Gladstone though, Gordon was the perfect choice. In addition to being regarded as an expert in colonial warfare Gordon had invaluable local knowledge and was highly regarded by Egyptian and Sudanese alike. Prior to the rise of the Mahdi Gordon had been the Governor General of the Sudan from 1877 to 1880, under the Khedive Ismail. Whilst in this position he did much to control the slave trade, earning great respect and admiration. Despite this Baring continued to reject Gordon for the position.

Curiously at about this time the British press got wind that Gordon was being considered as the man to save the day in the Sudan. Gordon was known to be deeply religious and had gained great affection from the church-going British public for his charitable work to help destitute youth. Letters poured in and Baring, reluctantly, accepted Gordon as the 'Qualified British Officer' to go to Khartoum. With Lieutenant Colonel J.D.H. Stewart, 11th Hussars, as his aide Gordon left London on January 18, 1884. They arrived in Khartoum one month later on February 18. Nobody knew it at the time but the fate of Gordon, Stewart, Gladstone's government and Mahdism was now sealed.

From the outset Gordon's position was unclear. Gladstone charged Gordon to act as an adviser whose brief was to ascertain the best way to conduct the evacuation. Technically though he was employed by the Egyptian Government who immediately appointed him Governor General of the Sudan, believing

OMDURMAN - Divisions

DIV. NUMBER	1-39	1	2	3	4	5	6	9	10	11	12	13
DIVISION I.D.	[9]	Al Din	Azraq	Siwar	Yaqub	Kara	Al W Helu	Wauchope	Lyttleton	Maxwell	McDonald	Lewis
CORPS	0-15	1	1	1	1	0	1	2	2	3	3	3
TYPE	0-1	0	0	0	0	0	0	0	0	0	0	0
ORDERS	0-2	0	0	0	0	1	0	0	0	0	0	1
OBJECTIVE #1	0-23	10	6	3	2	5	1	4	4	3	3	7
OBJECTIVE #2	0-23	7	7	7	7	0	7	5	5	5	5	0
LEADERSHIP	0-7	5	5	5	6	6	4	6	6	5	5	5
STAFF	0-7	4	2	2	3	3	4	5	5	5	5	5

DIV. NUMBER	1-39	14	15	16
DIVISION I.D.	[9]	Collinson	Baring	Brodwood
CORPS	0-15	3	2	3
TYPE	0-1	0	1	1
ORDERS	0-2	1	0	0
OBJECTIVE #1	0-23	1	3	6
OBJECTIVE #2	0-23	0	5	5
LEADERSHIP	0-7	5	5	5
STAFF	0-7	5	4	4

OMDURMAN - Armies

SIDE	N/S	SOUTH	NORTH
COMMANDER	[9]	Khalifa	Kitchener
SECOND I.C.	[9]	-	-
ARMY I.D.	[11]	Mahdist	Anglo/Egypt
	[11]	Army	Army
MAP LOCATION	(x,y)	4,24	10,0
ARRIVAL	0-95	0	0
OFF. OBJ. #1	0-23	3	4
OFF. OBJ. #2	0-23	7	5
DEF. OBJ. #1	0-23	5	0
DEF. OBJ. #2	0-23	0	0
MOVEMENT	0-15	7	7
STAFF	0-7	3	7
STRENGTH	0-7	0	0
LEADERSHIP	0-7	3	7

that Britain would now accept responsibility for the conduct of the operation. Nothing could have been further from Gladstone's mind.

Upon arrival in Khartoum Gordon sent a gift honouring the Mahdi and a letter offering him the Sultanate of Khordofan. The Mahdi returned the gift, declined the offer and sent Gordon a mahdist *Jibbah* with an invitation to become a follower of the Mahdiyya.

This incident combined with what Gordon had seen during his trip up the Nile to Khartoum convinced him that the Mahdi was a far greater threat than either Cairo or London had envisaged.

Subsequent appraisals of Gordon's career have suggested that he was sometimes prone to poor judgement and during his time at Khartoum he plagued his superiors with a barrage of conflicting reports and requests. However on this one vital point he was absolutely correct. A successful withdrawal to Egypt, if such an undertaking was actually possible, would only serve to postpone the inevitable. A full scale British-led military expedition was the only way to deal with the Mahdi.

Gordon therefore took it upon himself to reinterpret his mission from one of evacuation to active resistance to the Mahdi and the establishment of a viable government. In hindsight this was probably the best course of action. Considering the distance from Khartoum to Egypt and the limited resources at Gordon's disposal it is unlikely that, given the growing strength of the Mahdiyya, an evacuation would have been successful anyway.

The Mahdi tightened his grip around Khartoum while Gordon set about improving the city's defences. On March 13 the telegraph was cut and contact with the outside world became slow and sporadic. Although river boats could traverse the Nile to Berber the journey became increasingly perilous and Khartoum grew more and more isolated.

Gordon ignored direct orders to leave Khartoum. He argued that he could not simply abandon the populace to the doubtful mercy of the Mahdi. Gordon gambled on public pressure in Britain forcing the government into action. Probably this wasn't an unreasonable supposition.

What Gordon hadn't counted on was Gladstone's stubbornness. Despite repeated calls in parliament for action to save Gordon Gladstone clung to the view that the situation was not as desperate as some sections were claiming. The public was clamouring for something to be done and even the Queen voiced her concern. In Cairo, Baring was becoming increasingly agitated. He telegraphed London stating that "Having sent Gordon to Khartoum, it appears to me that it is our boundless duty, both as a matter of humanity and policy, not to abandon him". Gladstone remained unmoved.

On May 2, 1884 Berber, the last major staging post on the Nile below Khartoum fell to the Mahdists. The situation for Gordon was now critical and the pressure upon Gladstone became irresistible. Threatened with dissension

OMDURMAN - Objectives

OBJ. NUMBER	1-23	1	2	3	4	5	6	7	8
OBJ. NAME	[11]	To Kerreri	Kerreri Hill	Jebel Surgh	Khor Shmbat	The Tomb	Um Matragan	El Egeiga	Nav Point 1
MAP LOCATION	(x,y)	15, 1	9,2	11,10	12,18	4,24	2,5	15, 6	17,6
START (N)	1-95	1	28	8	8	8	28	1	28
STOP (N)	1-95	3	28	28	28	28	28	28	28
VPs/TURN (N)	0-255	1	0	2	2	5	0	1	0
VPs AT END (N)	0-255	1	0	5	5	50	0	1	0
MANEUVER (N)	0-15	2	0	10	12	12	0	7	0
START (S)	1-95	13	10	1	1	1	1	10	1
STOP (S)	1-95	28	28	28	28	28	28	28	28
VPs/TURN (S)	0-255	2	1	2	1	1	1	5	10
VPs AT END (S)	0-255	10	1	20	20	50	1	20	25
MANEUVER (S)	0-15	15	15	6	6	1	15	2	15

OBJ. NUMBER	1-23	9	10
OBJ. NAME	[11]	Nav Point 2	The Crest
MAP LOCATION	(x,y)	6, 26	1,9
START (N)	1-95	1	28
STOP (N)	1-95	28	28
VPs/TURN (N)	0-255	2	0
VPs AT END (N)	0-255	5	0
MANEUVER (N)	0-15	15	0
START (S)	1-95	28	1
STOP (S)	1-95	28	28
VPs/TURN (S)	0-255	0	1
VPs AT END (S)	0-255	0	1
MANEUVER (S)	0-15	0	15

from within the ranks of the government he authorised a sum not exceeding £300,000 to be used for a relief operation. General Garnet Wolseley, the hero of Tel el Kebir was chosen to command. He arrived in Egypt on September 9. That same day Colonel Stewart and Frank Power, the "London Times" correspondent in Khartoum, left on the steamer *Abbas*, in an attempt to run the Mahdist blockade. The vessel was captured en route and both men were killed.

Wolseley was faced with the daunting task of transporting a British army of 7,000 troops plus stores and munitions upriver and across desert to Khartoum, over 1,600 miles from Cairo. Thanks to Gladstone's intransigence there was now precious little time in which to achieve this.

Wolseley devised a two-pronged advance. The mobile Desert Column, having trained with camels, was to take the direct route from Korti across the Bayuda desert to Metammeh and hopefully establish contact with Gordon's steamers sent up from Khartoum. Gordon had sent his remaining four steamers upriver in the hopes of reaching a relieving force.

The second 'river' column would follow the Nile clearing the Dervishes as it advanced recapturing the various river outposts especially Berber.

The desert column had the best chance of saving Khartoum and their advance was as rapid as any force of its day could have been. It was commanded by the energetic Sir Herbert Stewart. The advance was punctuated by two fierce actions the first at Abu Klea on January 17, 1885 in which the steady training of the Guards averted a near disaster and the second action two days later at Abu Kru in which Stewart was mortally wounded.

Command devolved to Sir Charles Wilson who tried to follow up the two victories by seizing Metammeh in a *coup-de-main*. The town proved to be too well defended and the attack was called off. Wilson retired to Gubat further upstream. The one bright spot however was the sight of Gordon's 4 steamers. They had passed the 6th cataract and Wilson made contact. Their message was simple. Khartoum was barely holding on and a major Dervish assault could be expected at any moment.

Two of the four steamers were chosen for a desperate bid to try an reach Gordon. In order to attempt the return trip they required urgent overhauling and armouring. This took nearly 3 days and on the morning of January 24, 1885 they steamed off down the Nile towards Khartoum. Wilson commanded the expedition which comprised 240 Egyptian and Sudanese troops plus 20 men of the Royal Sussex Regiment. Wilson hoped that the sight of British scarlet might intimidate the Dervishes.

The waters of the Nile were particularly low at that time of the year and the boats frequently grounded. There were constant firefights from ship to shore with the natives and occasionally parties had to be sent ashore to plunder firewood for the boilers, by demolishing any houses within easy reach.

Despite the difficulties on January 28 the boats came within sight of Khartoum. However they soon came under fire from the city's guns and hundreds of hostiles lined the river banks. There was no doubt. Khartoum had fallen

OMDURMAN - Terrain Effects Chart

TERRAIN #	0-31	0	1	2	3	4	5	6	7
TERRAIN NAME	[11]	River Bank	-	Desert	Nile	Hills	Town	Walls	Forts
SIGHTING VAL.	0-7	0	0	1	1	7	12	7	3
MOVEMENT	0-7	0	0	1	1	2	2	2	1
COVER VALUE	0-7	0	0	1	1	5	7	7	5
FORT VAL. (N)	0-7	0	0	0	0	0	0	0	0
FORT VAL. (S)	0-7	0	0	0	0	0	0	5	5

TERRAIN #	0-31	8
TERRAIN NAME	[11]	Khr Shmbat
SIGHTING VAL.	0-7	1
MOVEMENT	0-7	1
COVER VALUE	0-7	1
FORT VAL. (N)	0-7	0
FORT VAL. (S)	0-7	1

and Gordon was probably dead. All Wilson could do was turn about and beat a hasty retreat downstream to Gubat and the Desert Column.

With Gordon dead and Khartoum under the control of the Mahdi Wolseley immediately began calling off the advance and the British expeditionary force was eventually withdrawn to Egypt.

In Britain the news of Khartoum's capture and Gordon's uncertain fate shocked the nation. There was an outrage against the government which eventually saw Gladstone ousted. In her diary Queen Victoria summed up the national sentiment when she wrote "The Government alone is to blame".

The Sudan after the fall of Khartoum.

After the collapse of Khartoum and the death of Gordon, Wolseley was in favour of continuing the operations which were then underway, if for no other reason than to avenge Gordon. However Gladstone, never fully supporting the expedition, decreed otherwise.

This is not to say that there were not still fierce clashes between the Anglo Egyptians and the Ansar; as the Mahdist army became known. The river column, under the command of General William Earle defeated the Mahdists at Kirbekan on the Nile on February 10, 1885 when a force of Ansar attempted to block the column's advance. The action is noteworthy only because a lone dervish rifleman firing at close range killed General Earle.

Despite the victories at Abu Klea and Kirbekan it was apparent that the heart had gone out of the expedition. Gladstone seized on the expedition's failure as a reason to recall the troops. By March 22, 1885 the relief column had fallen back to Korti, having beaten off numerous small scale attacks by the Ansar. The tents were struck and the army marched north back to Egypt.

In Britain the people deserted Gladstone and the government changed. Initially the mood of the public demanded revenge and plans were laid for another invasion of the Sudan. However evaluation of the state of Wolseley's forces and the proven capabilities of the Ansar demonstrated that the army needed substantial reinforcing and re-equipping. It was estimated that this would take at least a year.

As time passed the British public gradually lost interest and the whole affair was shelved, indefinitely. Strong garrisons were left on the Egyptian frontier and at Suakim on the Red Sea. Otherwise the Mahdi was free to run the Sudan as he wished.

Throughout 1885 there were some notable British successes around the Red Sea port of Suakim. These battles saw the first use of colonial troops, Australian, outside their own country. The Dervishes were soundly defeated at both Hasheen and Tofrek. The last action of the year was fought at Ginnis, another Ansar loss. Ginnis was the last time a British unit wore scarlet tunics into battle.

Despite these numerous tactical defeats the Ansar had achieved its strategic goal. The relieving armies of the Infidel had been kept away from Khartoum long enough for the capital to succumb. The British marched away taking the hated Egyptians with them and for the first time since the 1820s the Sudan was controlled by the Sudanese.

The Mahdi and the Ansar was riding the crest of a wave of victory and popularity and an ambitious invasion of Egypt was planned. But this all came unstuck with the sudden death, possibly from typhus, of the Mahdi in June 1885.

Surprisingly there was no violent power struggle. The transition to power of the Khalifa was entirely bloodless. All the powerful Amirs and the even the Mahdi's family unanimously swore allegiance to the Khalifa Adal-lahi as the "Khalifat al Mahdi" (the Mahdi's successor).

For the next ten years the Khalifa consolidated his position and there were no major clashes with either the Egyptians or the British. The Ansar was predominantly concerned with the war against Abyssinia to the South-east from 1887 - 89. This campaign culminated in the battle of Gallabat where for possibly the last time in history two large, essentially medieval, armies clashed at close quarters armed primarily with swords, spears, shields and other melee weapons.

Gallabat was an unlikely victory for the Mahdists which ended the war but it had been costly. Perhaps the most telling loss for the Ansar was the curious death of Hamdan Abu Anja, probably the most skilled of all the Ansar's field commanders. He died after tak-

OMDURMAN - Small Arms

SMALL ARMS #	1-31	1	2	3	4	5	6	7
SM. ARMS I.D.	[11]	Lee Metford	Martini	Musket	Spear/sword	Derv Rifle	Naval Maxim	Lance/Carb
RANGE	0-1	1	1	1	0	1	1	1
FIRE VALUE	0-7	7	4	0	0	2	7	5
MELEE VALUE	0-7	5	5	5	7	1	0	7

OMDURMAN - Artillery

ARTILLERY #	1-31	1	2	3	4	5	6	7	8
ARTILLERY I.D.	[11]	Mtn Gun	Krupp	Muzzle Ldr	Nordnfdt MG	Field Gun	40 Pounder	Maxim MG	Howitzer
RANGE	0-5	3	3	2	2	5	5	4	5
RATE OF FIRE	0-7	2	3	1	4	6	7	7	4
EFFECTNESS	0-7	1	2	1	2	7	7	7	4
PENETRATION	0-7	1	1	0	2	6	7	7	5

ing some simple herbs to cure, of all things - indigestion.

The decline of the Mahdist state.

In 1889, with the Abyssinian frontier secure, the Khalifa decided it was time to strike north against the old enemy, the Egyptians. The Amir Abd al-Rahman wad al-Najumi was to lead the invasion of Egypt however the forces allocated to this ambitious gambit were pitifully small. Najumi commanded only 5,000 warriors. His army was accompanied by 8,000 camp followers.

One explanation is that the Khalifa believed that the Egyptian army would be no better than the rabble which Hicks had commanded back in 1883.

Najumi's invasion force marched from the northernmost Mahdist outpost of Saras into Egypt on July 1, 1889 via an inland route away from the Nile. Their plan was to suddenly strike out of the desert north of Aswan where it was believed the appearance of the Mahdist force would trigger a large-scale local rebellion.

Things went wrong from the start. Their initial objective was 25 miles north of Aswan. Perhaps a fast moving, highly efficient mounted Flying-column could have achieved this but Najumi's force was little better than a rabble the progress of which was further slowed by the glacial pace of the camp followers. After a month on the march Najumi's invasion force had only reached the village of Tushki, not even half way to its objective.

At Tushki the Egyptians, commanded by Sirdar Major General Grenfell, were waiting. Najumi's forces had shrunk to only 3,300 fighting men but he remained confident that the Egyptians who faced him would turn and run as in the past.

On the morning of August 3, 1889 the Ansar attacked Grenfell's Egyptian troops. Since Tel el Kebir the Egyptian army had been retrained and re-equipped by the British. Egyptian brigades were led by British officers. After seven years of improvement they demonstrated at Tushki that the army of Hicks Pasha was a thing of the past.

The mahdists were astonished to find that the Egyptian troops maintained their positions and coolly doled out a murderous hail of volley fire. The Ansar attack was quickly ground to pieces.

When the dust settled over 1,200 Ansar were dead, including Najumi. A further 4,000 camp followers were captured. Only about 800 escaped.

The Mahdists were compelled to abandon Saras. They withdrew to Suarda, over 100 miles south of the nearest Egyptian garrison. This marked the beginning of the end of Mahdism.

Kitchener and the Dongola Expedition

When the final assault came on the Mahdist state it was as a consequence of squabbling between the great powers of Europe rather than the direct action of the Khalifa. After the death of Gordon and the expulsion of Egypt the other European powers in Africa regarded the Sudan as a vacuum which would soon need filling. The Italians maintained a tenuous hold on the Sudan via their occupation of Kassala in the south. The French, Germans and Belgians all had designs on the Sudan from the South and East. None of the major powers ever considered that the Mahdists, being Sudanese, might have had a legitimate right to govern their own country.

The British got their chance to legitimately seize the initiative when in 1896, the Italians were ignominiously defeated by the Abyssinians in the disastrous battle of Adowa. (As colonial disasters go Adowa is about as bad it got. Isandhlwana pales in comparison. It's possible that this action may be the subject of a future DB scenario S.F.) The Italians, fearing for their capacity to hold on to their possessions in Abyssinia and Eritrea pleaded with the British to make some kind of demonstration against the Mahdists who were growing increasingly hostile and expansionist.

The Disaster of Hicks Pasha

William Hicks had a totally unremarkable career. His time had been spent mostly in India and the tedium was punctuated only by the mutiny and the Abyssinian campaign of 1867. He was actually called out of retirement to lead the Egyptians in the Sudan.

The Egyptian Army of the Sudan was never highly regarded by Cairo. It was always considered a secondary institution and received cast-offs from the north. When William Hicks assumed command in January 1883 he pleaded for some of the better quality troops being trained by the British. Instead he was bolstered by 3,000 conscripts of questionable worth including 1,800 of Arabi Pasha's mutineers who were still smarting from their ignominious defeat at Tel el Kebir.

Hicks tried to do the best with what he had. Discipline and morale amongst the troops was woeful. During the march from Cairo to Khartoum the troops seem to have forgotten their drill and the artillerymen proved incapable of serving their guns.

Despite these shortcomings Hicks' army managed some successful sorties along the Nile south of Khartoum. They shattered an attack of Baggara cavalry and, three days later, on April 29 gave the Dervishes a severe drubbing in front of Jabel Ain. Hicks' Army of the Sudan inflicted 500 casualties on the reckless Mahdists including a dozen ranking 'Amirs' for the loss of only seven Egyptians. Hicks was in high spirits when he began planning the reconquest of Kordofan.

With this backdrop 'Hicks Pasha', as he became known, marched out of Khartoum to defeat the Mahdi and recapture El Obeid. His column consisted of 8,000 troops, 14 field guns, 6 Nordenfeldt machine guns, 5,500 camels, 500 horses and 2,000 camp followers.

He firstly moved south to Dueim on the Nile where the garrison continued to withstand the Mahdists. (Unlike El Obeid, Dueim could conceivable have been resupplied by boat.) Hicks remained there for a month awaiting reinforcements. When they did not arrive he decided to proceed with what he had on hand. On 23 September 1883, with morale low, Hicks Pasha marched his army south-west towards El Obeid and oblivion.

It was a maxim of Napoleon that of all natural barriers desert was the most difficult for an army to traverse. Hicks was advancing into a vacuum. The Mahdi knew, from deserters, the exact disposition and morale of the Egyptian column. He refused to give battle preferring to trade space for time while his army trained and he could lure Hicks to a killing ground of his own choosing.

As he had done at El Obeid, the Mahdi sent an emissary to Hicks offering him the chance to surrender. It was of course ignored. The Mahdi also left warning leaflets in the path of the Egyptian advance. The Egyptian troops put them to good use as lavatory paper.

By the end of October Hicks' force was down to 7,000 ravaged by thirst, death and desertion. The column had by this time also lost a significant proportion of its camels and horses. On 3 November Hicks reached Kashgeil, in the midst of the Shaykan thorn forests 12 miles south of El Obeid. It was here that the Mahdi brought the full weight of his 60,000 strong army to bear against Hicks' weakened column.

Hicks Pasha's force had no line of retreat and even if he had been able to withstand the Mahdist assault it is doubtful that any of his troops could have made it back to the Nile.

What ensued was a desperate running battle over three days. The Mahdists attacked Hicks' square on the Third and again on the night of the Fourth. In a bid to reach the next waterhole he split his remaining forces into three small squares early on the Fifth. They were all overwhelmed. Dervish eyewitness accounts describe Hicks as one of the last to die, emptying his revolver then fighting gallantly to the bitter end with his sword.

For the Mahdi the destruction of Hicks Pasha's expedition represented a goldmine both materially and morally. All of the Egyptian weapons including the Krupp breechloaders and Nordenfeldt machineguns fell into the hands of the Mahdists. However this victory was hailed as a gift from Allah and the Mahdi was imbued with a degree of prestige and authority hitherto unknown.

Certainly Hicks was no military genius but like Gordon he deserved more support from those who sent him 'In harm's way'. The failure of Cairo, and the British overlords, to adequately equip Hicks Pasha ensured absolutely that a major commitment of British arms would eventually be necessary to rid the Sudan and Egypt of Mahdism.

In 1896 the Khedive announced plans to reoccupy the Northern Sudanese province of Dongola. Leading the operation was General Sir Herbert Kitchener, Sirdar (Commander in Chief) of the Egyptian forces. Kitchener had replaced Grenfell in 1892 and he was a most remarkable organiser. Like Gordon he was a Royal Engineer Of-

ficer and his greatest contribution to the coming campaign was an acute understanding of the logistical requirements of operations down the Nile.

Initially the Egyptian forces would be on their own and the troops under the Sirdar's command numbered only 18,000. Unlike Wolseley's campaign of 1885 though Kitchener would not be hamstrung by unreasonable time constraints and the dead hand of the Politician. He also had some powerful assets at his disposal; The Sudan Military Railway, which was to be constructed solely to supply his troops, and a flotilla of fearsome armoured gunboats.

By 1896 the Anglo Egyptians were armed with much better firearms than the Ansar who were still fighting with old captured Remingtons. The Egyptian and Sudanese brigades were fully equipped with Martini-Henry rifles.

The British Division was armed with the new Lee-Metford, a five-round magazine-fed rifle which fired a higher velocity smokeless cordite round than the Martini-Henry. Never the less the Martini-Henry was still a formidable weapon and superior to the Remington.

The Ansar riflemens' habit of shortening their remingtons and firing high further diminished the effectiveness of their firepower. In the coming campaign the Anglo-Egyptians would enjoy a far greater superiority in weaponry than eleven years earlier.

The first step in the campaign was the establishment of an advance staging area as far down the eastern bank of the Nile as possible. Akasha was chosen with a view to seizing the Ansar's fortified camp at Firket. Using a combination of river boats and the new railway line Kitchener was able to mass 9,000 troops at Akasha. Firket and its Ansar garrison estimated at just 3,000 was barely 16 miles away.

As Sirdar Kitchener was in overall command but the conduct of the actual fighting was directed by Major General Archibald Hunter. Hunter commanded the Egyptian/Sudanese division; the core of the remodelled Egyptian army. He was a fourteen year veteran of the Sudan fighting and in him Kitchener had the perfect sword arm.

After a night march the Egyptians achieved complete surprise in their assault on Firket. In a rare failure of their intelligence system the Mahdists did not detect the approach of either Hunter and his main body of 7,000 troops or the desert column under Burn-Murdoch which outflanked Firket to cut off the Ansar's escape route.

The assault was launched 05:00 and by 07:30 had been completely successful. The Mahdists were shattered with the loss of 1,000 killed and 600 captured. Egyptian losses were 22 killed and 91 wounded.

In typical fashion Kitchener then paused for three months to concentrate the rest of his forces, including the gunboat flotilla and to allow the rail line to be extended.

By early September his army numbered 13,000 supported by 22 guns and four gunboats. For the final push to Dongola which is on the Western bank of the river Kitchener's army was required to cross the Nile. The most likely crossing point was Kerma.

The Mahdist commander on the spot, Muhammad wad Bushara, chose to entrench his 5,600 troops on the western bank at Hafir and force the Egyptians to come at him from across the river.

After an ineffectual bombardment by shore based batteries and gunboats Kitchener decided to use guile rather than risk a costly river crossing under fire. He ordered his gunboats to proceed upriver and allowed rumours to be spread that he was marching upstream to cross behind the Hafir position. The ruse worked. The Ansar, fearing for their families in Dongola abandoned their position at hafir and Kitchener quickly moved his army across the river.

With no natural barrier on which to anchor their defence the outnumbered Mahdists just kept retreating as far as Metammeh, Berber and Atbara. Dongola was taken without a fight on September 23, 1896.

Kitchener
A man who was not afraid to wear a silly hat

Kitchener's strategy was totally vindicated and the rebuilt Egyptian army had repeatedly demonstrated that it now had the measure of the Ansar. Over 450 miles of the Nile had been secured south of the Egyptian frontier for the loss of fewer than 170 battle casualties.

The final drive to Omdurman.

With Dongola secure Kitchener sailed directly to London to plead personally for sanction to reconquer all of the Sudan. London was receptive to his suggestions. It could be argued that an Anglo-Egyptian reconquest would avenge Gordon and free the Sudanese people suffering now these eleven long years under the tyranny of the Mahdiyya. If it also happened to block any expansion into the region by the French, the Germans or the Belgians then that was an added bonus.

He returned to Cairo in December 1896 with London's blessing and the promise of British troops, should they be needed.

Once again Kitchener's main concern was establishing secure supply lines for his troops. He opted for a more ambitious use of the railway. Instead of hugging the river and its circuitous

The Battle of Abu Klea.

When Gladstone finally succumbed to the pressure to mount an expedition to rescue Gordon and Khartoum it was virtually too late. Wolseley, the man in charge, had a vast distance to cover from Cairo to Khartoum. The Nile took a circuitous route around the Bayuda desert and any transit by boat required the negotiation of all six Nile cataracts.

A flying Desert Column was formed around the three camel trained regiments; the Guards, the Heavy and the Mounted Infantry camel regiments. The column eventually numbered around 1,800 including artillery, cavalry, engineers, a battalion of the line (1st Bn 35th Royal Sussex Regiment) and one of rifles, Marines and Bluejackets.

Commanded by Major General Sir Herbert Stewart KCB, the Desert Column was given the task of taking the direct route across the Bayuda desert from Korti to Metammeh, seizing the wells of Gakdul and Abu Klea in the process, and establishing some sort of contact with Gordon's steamers from Khartoum. The rest of Wolseley's forces would take the long route following the Nile.

The advance elements moved from Korti on December 30, 1884. Stewart was one of Wolseley's ablest Lieutenants. A veteran of the Zulu war of 1879, the Transvaal war of 1881 and Tel el Kebir he was well aware of the urgency of his mission and drove the column with great energy. By January 16, 1885 the Desert Column was bivouacked three miles from the wells of Abu Klea and was within striking distance of Metammeh on the Nile.

In any desert action water is as precious as ammunition. After their rapid dash across the desert Stewart's column was critically low and it was vital that he seize the wells and replenish water supplies the very next day. Scouts detected a large force of Ansar barring the way to the wells estimated at between Ten and Fifteen thousand. ('Ansar' meaning 'follower' or 'helper' was the name given by the Mahdi to his army of faithful.) The column therefore built a strong 'zareba' which was harassed throughout the night by rifle fire and the beating of drums.

On the morning of the 17th Stewart left a small garrison to defend the Zareba and the baggage while the bulk of the column formed a large square and marched slowly in the direction of the wells. The Ansar began limited harassing fire from cover.

The troops in the square were drawn up in four ranks with the faces comprised of approximately 350 men in the front including the three 7pounder screw guns in the centre, 300 men on each side and 300 forming the rear face. The camels were packed tightly in the centre of the formation with the Naval Brigade's Gardner gun inside the square close to the left rear corner. Mounted infantry were thrown out to the left and right as skirmishers.

The square's progress was slow over the uneven ground and frequent halts were called to redress the faces and allow the surgeons to attend to those men wounded by the Ansar rifle fire. This redressing of lines was made more difficult by the recalcitrant nature of the camels crammed within the square.

The square moved to the crest of a slight rise. The front half of the formation was elevated above the rear. From a line about 200 yards to the front a large force of Ansar rose from concealment and with much shouting and beating of drums charged the front left face of the square.

The front of the square immediately opened fire on the Dervishes who jogged forward in a serrated line of phalanxes their speed increasing almost to the

Continued on next page

path he decided to run a line directly across the Nubian desert from Wadi Halfa to Abu Hamed.

The first sleepers were laid on new year's day 1897.

By July the line was halfway to Abu Hamed. Hunter led a flying column of 3,600 men across the Nubian desert during the hottest time of the year. Covering 118 miles in 7 and a half days across some of the most inhospitable terrain the Mahdist garrison at Abu Hamed was shocked when Hunter's column appeared. Still the garrison of 700 refused to surrender.

Hunter sent in his Sudanese infantry with bayonets fixed. The mahdists fought bitterly but were eventually driven out leaving 250 dead. Their was no telegraph connecting him to Kitchener so he had the Mahdist corpses thrown into the river knowing that the current would carry them downstream to Merowe where word would reach the Sirdar that a battle had been fought.

The gunboat flotilla was hauled over the fourth cataract and rushed to Abu Hamad to provide support for Hunter however a Mahdist counter-attack never materialised.

Hunter had his eyes fixed on Berber, major Nile centre and link with Suakim on the Red Sea.

The garrison commander, Zaki Uthman, became increasingly nervous and his troops were approaching mutiny. By August 24, when promised reinforcements did not arrive he took it upon himself to abandon Berber falling all the way back to Shendi south of the Atbara river.

Hunter heard rumours of Berber's evacuation and sent a patrol of 40 irregular camel-men to investigate. They arrived on August 31 and found Berber ungarrisoned. They immediately occupied the town and sent word back. To paraphrase a line from 'A Bridge Too Far' the Mahdists were losing faster than the Sirdar could win.

Kitchener was now faced with a dilemma. Berber had fallen months ahead of schedule. His rail line had not yet

The Battle of Abu Klea - from previous page

pace of a galloping horse. As the Dervishes narrowed the distance to 100 and then to 80 yards the disciplined fire from the Martini-Henrys of the Guards and Mounted infantry of the front face took a fearsome toll. Great gaps appeared in the Ansar line where men were knocked backwards by the impact of the fire.

The rear half of the square could not see what was happening to the front. On the left the rear face of the square (Heavy Camel Regiment) was drawn back to clear a field of fire for the Naval Brigade's Gardner gun, which had been wheeled outside the square's left rear corner to bring fire to bear against any overlap by the Ansar. This movement opened a gap in the square's left face which was already badly in need of redressing anyway.

The attacking Ansar in the front suddenly broke to the right, either by design or because the fire from the four ranks of the Guards and Mounted Infantry was just too intense. They wheeled wide right past the British skirmishers around the left corner and face of the square. During this manoeuvre the left face of the square could not bring fire to bear against the Ansar without shooting into their own skirmishers who were desperately moving towards the safety of the square.

The Gardner gun was quickly wheeled around to meet the Dervishes who were now charging directly towards the left rear corner of the square. Of course it is a well known natural law that if the worst possible thing can happen it probably will. This day was no exception. After firing only a few rounds the Naval Brigade's Gardner gun jammed. In a scene reminiscent of Isandhlwana the bluejackets manning the gun were quickly engulfed by the onrushing dervishes.

Captain Lord Charles Beresford RN, commanding the Naval Brigade was knocked to his feet during the fierce melee but miraculously he was uninjured.

'Battling' Colonel Fred Burnaby of the Royal Horse Guards was not so lucky. Being the only officer nearby he rode outside the square to direct the defence. He ordered a company of the Heavy Camel Corps to move and help the Naval Brigade. This of course opened the gap in the square further. Burnaby's horse was brought down and, along with most of the skirmishers on the left flank, he died where he stood slashing wildly with his sword. A yawning gap had opened in the rear corner of the square and the Dervishes poured in.

Fortunately for the British they were not rushing into a vacuum. The camels, which the troops cursed because of the constant need for stopping and redressing lines which they caused, were crowded inside the square. The dervishes now ran into this packed mass of animals and baggage.

The situation was still desperate. The left and rear faces of the square had been separated and were both being pushed in. A large number of Dervishes were furiously rushing into the centre of the square hacking and slashing at camels and handlers in a wild melee. Rifles jammed and Bayonets bent.

It was at this critical moment that the true worth of highly trained troops became evident. The Guards, who were holding the right front and corner of the square, had maintained their formation perfectly. Their rear rank coolly conducted an about face. Since they were on higher ground than the confused melee at the rear corner they were able to fire over the camels directly into the tightly packed Dervishes pouring into the gap. They then advanced in line and cleared the square shooting and bayoneting any Dervish who remained inside.

The Ansar retired in good order and all was quiet. The whole action had lasted no more than five minutes. After the roll was called it was revealed that in those five minutes Nine officers and 72 other ranks had been killed; Eight officers and 112 other ranks were wounded. As for the Ansar approximately 1,100 dead were counted from a force estimated at over 11,500.

After the battle Lieutenant Douglas Dawson wrote in his diary, " I think that all present would never care to see a nearer shave....and it is, in my opinion, due to the fact that the two sides not immediately attacked stood their ground that the enemy retired discomfited. Had the Guards moved, none of us would have lived to tell the tale."

reached Abu Hamed. Kitchener decided to risk holding Berber despite it being 130 miles away from his rail head. This was obviously a difficult decision for a commander as prudent as Kitchener but it worked. The Mahdists failed to mount any action and Berber was occupied by a brigade in September 1897.

The sudden collapse of Berber put Uthman Diqna and all of the eastern Sudan in peril. His forces could now be attacked from the British in Suakim on the Red Sea and from Berber on the Nile. He was compelled to evacuate his stronghold at Adarama on the Atbara river and fall back towards Omdurman, the new Mahdist capital, built near the ruins of Khartoum. His withdrawal meant that the old caravan route from Suakim to Berber could be reopened which greatly facilitated supply of the Berber garrison.

At the end of October the railway reached Abu Hamed and Berber could be supplied by rail and then boat. But

Action at Omdurman
McDonald's 1st Egyptian Brigade (units 87 and 88) goes into action. In contrast to paintings of the battle the Ansar rarely got close enough to the Anglo-Egyptian army to be seen in photographs.

the season was nearing an end and the Nile began its treacherous rising and falling. If Kitchener didn't want his gunboat flotilla, which had now grown to seven vessels, stranded north of the Atbara they would have to be stationed south of that tributary. To supply the gunboats a depot was established at the junction of the Nile and the Atbara. This depot steadily grew into a large fortified camp known as Fort Atbara. It would play an important part in the final encounter before the battle of Omdurman.

The rest of the year was spent with both sides gearing up for the inevitable showdown. The year ended with the Sirdar's armies having cleared the Nile as far as the Atbara river for almost negligible losses against an enemy who was conspicuous by his inactivity.

Kitchener knew that the Ansar would not remain idle forever. In January 1898 he asked London to make good its promise and send some British troops to reinforce his Egyptian and Sudanese brigades. The expected move by the Ansar came in mid February 1898. The Emir Mahmud Ahmad moved his 10,000 many force out of Metammeh towards the Egyptians. They linked up with Uthman Diqna's force and the whole totalled some 16,000 warriors.

Mahmud wanted to launch a very unimaginative direct assault on Fort Atbara. Uthman Diqna knew that, given the enemy's immense firepower any attack of that nature was doomed to failure.

Uthman prevailed and he directed the Ansar to bypass Fort Atbara and raid Kitchener's supply lines. As a prelude the Ansar marched to the river Atbara, which was just a trickle and constructed a well fortified 'zareba' at Nakailia only 20 miles from Fort Atbara on March 20. The Mahdists quickly ran into supply problems which meant there would be no further advance north for the time being. So both camps warily regarded each other.

It was Kitchener whose patience gave out first. In April he cautiously advanced to within striking distance and planned his attack for the morning of April 8, 1898 after a night march. He displayed none of his usual planning. The three Egyptian and one British brigades were to simply directly assault the Ansar's fortified camp. After an hour long bombardment which left the defenders in their rifle pits quite unscathed the attack was launched at 07:40 to the sound of pipes, drums and bugles. When the Mahdists emerged from their trenches their volleys almost brought the advance to a halt. However the Sirdar's troops recovered and broke into the camp. The action quickly broke down into a series of desperate struggles in which the Mahdists were driven out at the point of a bayonet. The Ansar eventually broke and withdrew south across the Atbara. For Kitchener it had been the most costly engagement of the campaign thus far with more than 550 men killed or wounded.

Things remained quiet for most of the Summer months. It was probably too hot for either side to mount much in the way of offensive action. Both sides built up their strength. Kitchener received further reinforcements. The most notable event of the summer was the Khalifa's decision to abandon an excellent defensive position in the Sabaluqa Gorge 50 miles north of Omdurman.

In order to pass the gorge Kitchener's ground force would have to move inland away from the support of their gunboats or march through narrow passes right at the river's edge. It is believed that the Khalifa was concerned about supplying troops at the gorge and rather than risk having them cut off he opted to withdraw his army closer to his supply base at Omdurman.

The Battle of Omdurman.

When it finally came the showdown was something of an anti-climax. At the end of August the Sirdar's army numbered nearly 26,000 with 44 guns, 20 maxims and a flotilla of ten gunboats. In mid-August they began their inexorable march from Fort Atbara to Omdurman. By September 1, 1898 Kitchener's army had reached the Nile village of Egeiga just 6 and a half miles from the Mahdist capital.

The Anglo-Egyptian army had formed a semi-circular zareba with both ends anchored on the Nile and covered by gunboats. In the south, the two British brigades were positioned to cover the area in which Kitchener felt an attack most likely. The rest of the perimeter was formed by Egyptian brigades. The fourth Egyptian brigade remained in

the centre in reserve. The army was drawn up two ranks deep and the frontage stretched for almost two miles. Cavalry scouts came in and reported the Mahdist army concentrated west of Omdurman and heading north in the direction of the Kerrari hills.

The night of 1-2 September was a nervous one. The British commanders were nervous that the Ansar might attempt a night time charge which would seriously limit the effectiveness of the Anglo-British firepower.

When one considers the relative strengths of the two armies, and considering that it is unlikely that the Ansar had even a two-to-one numerical advantage, a night attack was probably their only real chance for a victory. Despite urgings from his Amirs for just such an attack the Khalifa preferred to wait until light arguing that at night he would be unable to control the troops or communicate with his commanders. It's ironic that when the attack was launched the kind of command control to which he referred would have been quite impossible.

Kitchener could not have hoped for a better morning than September 2, 1898. His troops had survived the terrors of the previous night without a Mahdist attack. Just before 7:00am the Ansar host swept around either side of the Jebel Surgham and came straight for the zareba. The British Brigades, with their Lee-Metfords commenced section volleys when the Dervishes where still 2,000 yards out. The Egyptians with their Martini-Henrys commenced firing at about 1,000 yards. All of the Sirdar's guns joined in including the guns and Maxims of the gunboats.

To be sure the Khalifa employed about ten heavy guns of his own at the battle but the problem, common to many native armies of the time, was the ammunition. It was usually made locally and was not as good as the original product produced in Europe. Most shells either exploded prematurely or fell short.

The Mahdist warriors pressed home their attack with the utmost bravery and resolution but by the time they closed to within 500 yards the fire from the Sirdar's troops had become utterly murderous. No dervish came closer than 300 yards to the perimeter. Some of the Ansar riflemen found scant cover in a shallow depression about 300 yards from the zareba but the intense fire from the enemy was overwhelming.

The only real threat was to the cavalry and the camel corps who were scouting outside the zareba and were very nearly cut off by the sudden rush of the Mahdists. However, covered by the fire of nearby gunboats, they conducted a fighting retreat and made their way into the encampment where they added their fire to the other brigades.

By 08:00am the surviving Ansar withdrew and the Khalifa's forces had been thoroughly shattered. There were a few minor skirmishes and some tense moments following the major Mahdist attack, including the disastrous charge of the 21st Lancers, but no Ansar came within 300 yards of any Anglo-Egyptian brigade. The only cause for concern was the enormous expenditure of ammunition. A check of one of the Egyptian brigades showed that the men had an average of only two rounds per man remaining in their pouches.

The rescue of Emin Pasha

One of the lesser known but no less interesting sideshows of the Sudan campaigns was the tragi-comedy of the 'rescue' of Emin Pasha from Equatoria. Equatoria was the southernmost province of the Sudan and following the death of Gordon and the collapse of Khartoum it remained under the control of an isolated Egyptian garrison. This Garrison was commanded by Emin Pasha whose real name was Eduard Schnitzer, a German. When the British public got wind that another European was cut off and surrounded by fanatical Mahdists there was a fierce hue and cry demanding that Emin Pasha not be abandoned to a fate such as Gordon's.

While the government would not be drawn into another official rescue attempt they graciously allowed a 'private' expedition to be mounted and for its leader none other than Henry M. Stanley was chosen. This was the same Stanley of "Doctor Livingstone I presume" fame, and regarded as the greatest African explorer of the day.

Stanley however, seemed more interested in exploring uncharted territory than actually rescuing anybody. To begin with he lobbied for, and won approval to, mount his rescue bid from West Africa rather than the much closer East Africa. Stanley's route involved marching 807 men, provisions, ammunition, a Maxim gun and a collapsible metal boat up the Congo and Aruwami rivers through hundreds of miles of uncharted wilderness.

The expedition departed Zanzibar on February 25, 1887. It was not until December 1888, fully 22months later, that the final remnants of the column reached Emin Pasha in Equatoria. Only 233 of the original 807 souls who started with Stanley had completed the journey.

Emin Pasha was astonished when Stanley informed him that his ragged band of followers had come to his rescue. To the Egyptian garrison the column seemed the ones in need of rescue. The Mahdists had never really threatened Equatoria and Emin Pasha felt no urgent need to abandon the province. It was rumoured that Stanley had to demand a withdrawal at gunpoint. Stanley, Emin Pasha, the Egyptian garrison and the pitiful remnants of the 'relief' expedition eventually marched back into Zanzibar in September of 1889. Stanley's folly had taken over two and a half years, cost nearly 600 lives and in the end Emin Pasha didn't really want to be rescued!

Kitchener's gunboats

For the reconquest of the Sudan Kitchener insisted on absolute control of the Nile. For this purpose he designed his own gunboats which were constructed in London then disassembled and shipped to Alexandria and Port Said. They should not be confused with the tiny improvised vessels of Gordon's day. Kitchener's flotilla was fully armoured and equipped with a mixture of 6 and 12 pounder quick firing artillery plus Maxim and Nordenfeldt machineguns. each boat carried enough firepower to demolish any of the Mahdist forts which lined the river. In the campaign they gave good service providing powerful fire support to the Sirdar's troops.

At the time of the battle estimates of the size of the Mahdist army ranged from 50 - 60,000. Casualty figures for the Mahdists were estimated at from 10,000 to 15,000 killed and wounded.

The Mahdi's tomb in Omdurman was blown up and his remains were thrown into the Nile. Kitchener marched triumphant into Khartoum and held a memorial ceremony for General Gordon in the ruins of the Governors palace. Mahdism was essentially finished save for some minor mopping up operations but Kitchener had a new threat to deal with - the French.

The Egyptians pursued the Khalifa remorselessly eventually running him and his remaining 5,000 followers to ground in 1889 at Gedid. The last of the Ansar charged Colonel Windgate's Egyptian flying column and the issue was never in doubt. The Khalifa, including his family were all killed and thus ended the last vestige of the Mahdist state in the Sudan.

Epilogue- the Fashoda incident.

While the Ansar had been busy facing the Sirdar's threat from the north The Khalifa was powerless to counter incursions in the south. There had been Belgian, Italian and particularly French incursions.

Kitchener loaded five of his gunboats with troops (Probably all British) and sailed down the Nile on September 10, 1898 to see what the French were up to. On September 19 his boats approached Fashoda, a fort on the Nile which was now flying the Tricolour and garrisoned by 120 Askaris under the command of a French officer Captain Marchand.

This was obviously a tense moment and it seemed for a while that fighting may ensue. the officers both showed restraint and agreed to a 'joint' occupation until their respective governments could sort things out.

Typically the French argued vehemently that they were right and the British grudgingly accepted that the French claim was stronger than their own but public outcry in both countries stirred and the whole affair escalated. The French Mediterranean fleet was brought to Cherbourg and both countries took a particularly belligerent stand. It seemed that the Fashoda incident would plunge Britain and France into full-scale war. Europe teetered on the brink of armed conflict then suddenly and without explanation the French backed down. Marchand was ordered out of Fashoda and Europe breathed a sigh of relief. It is interesting to speculate how this century might have developed if it began with the British and French empires at war.

CREATING THE SCENARIO

If this is the first time you have tried to transfer a magazine scenario onto a save-game disk (or hard disk), we recommend you follow these directions. The letters in parentheses after each heading refer to the corresponding section in the Decisive Battles manual.

There is some additional information for IBM users at the end of this section. Be sure to read it, especially if you have an EGA/VGA card and want to take advantage of our "full map" graphics. Macintosh users should note there are some changes to the numbering system in their design manual and that access to the various design routines is obtained through conventional, pull-down Mac menus.

Preparing the Disk [3]. Boot up the Master Disk and select <CREATE> from Menu H. Select <SCENARIO> from Menu B. <LOAD> any historical scenario. You have been processed through to Menu J. Select the <DISK> line from that menu.

If you have one disk drive, remove the Master Disk and replace it with a blank disk. If you have two drives, remove the Scenario Disk from the second drive and replace it with a blank disk.

Select <FORMAT> from the on-screen menu. Once this is done, select <SAVE> from the menu and store any of the historical scenarios in any unused save-game location. This procedure prepares the template on which we will build the *Omdurman* scenario.

Hard disk users should note that all they need is enough room on their hard disk to hold the new scenarios. Macintosh users should note that they do not need to use an existing scenario as the template. They can select *New* from the File Menu.

The WarPlan™ menus are displayed on the back of the game menus card. Refer to this when necessary. Macintosh users should check their WarPlan™ manual for the location of the different design routines.

Title [5c]. There are three lines of text for the title of the scenario:

Omdurman

The end of Mahdism

September 1-2, 1898

Go back to Menu J and re-save the game in the same location.

Map Size [5a(i)]. The top left sector is 0. The bottom right sector is 7. Macintosh dimensions are 18 x 27.

Define Terrain [5a(ii)]. The accompanying Terrain Effects Chart lists the details of the active terrain types for this scenario. Select (or paint) the icons

of your choice to represent the eight terrain types.

Create Map [5a(iii)]. Select the <CLEAR> line from Menu J. Clear the map and the data. Use the accompanying map to build up the screen map. Do not forget to assign control to each hex.

Save the game again. How often you save really depends on how lucky you feel. After several major disasters, I choose to save after each section is completed.

Limits [5b(i)]. Before you can enter the military units for each side, you must set the force limits. The force limits are as follows; corps (2), divisions (9), brigades (81). Apple II and C64 users must also set the artillery weapon limit to 11.

Weapons [5b(ii)]. Consult the Small Arms and Artillery Tables and enter the data as shown.

Forces [5b(iii)]. Edit the North (Anglo-Egyptian) Army HQ and the South (Mahdist) Army HQ as shown in the data tables.

The objectives assigned to the Army HQs will not appear on the screen until after the objective data base has been entered.

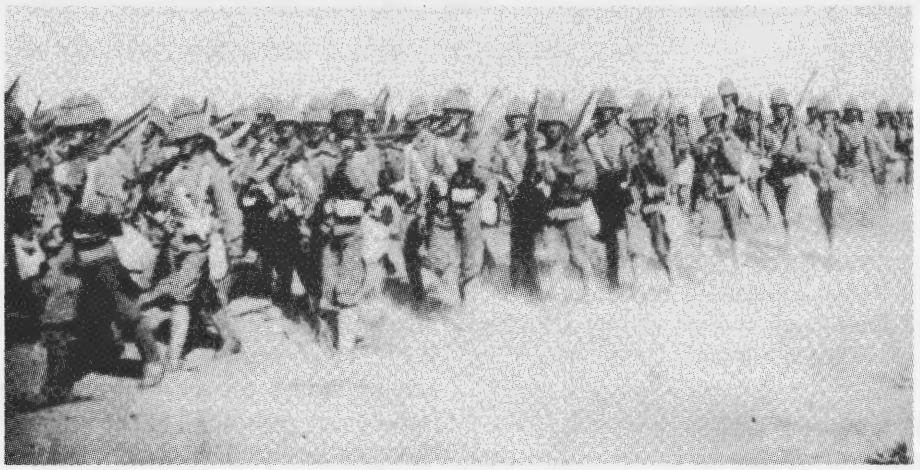
The North has two corps. The South has 1 corps. Consult the Corps Table and enter the data as shown

The North has 8 divisions. The South has 6 divisions. Consult the Divisions Table and enter the data as shown.

The North has 23 brigades. The South has 52 brigades. Consult the Brigades Tables and enter the data as shown.

Objectives [5b(iv)]. There are 10 objectives. Consult the Objectives Table and enter the data as shown.

Scenario Setup [5d(i)]. Enter the following data. Date (1), Month (9), Year (98), Century (18), North Maximum Hex Movement is (5,6,9,9,9), South Maximum Hex Movement is (5,7,9,3,9), neither side is encamped. The entrenchment values (introduced only in Volume II) are 5 for the Anglo-Egyptian army and 0 for the Mahdists. VP awards are 15 per leader, 8 per 100 men (North), and 10 per leader, 1 per 100 men (South).



Victory!
The triumphant Guards about to enter Omdurman late on September 2nd

IBM and Macintosh users should note the combat value for this scenario is 6 for the North and 0 for the South.

Scenario Details [5d(ii)]. This is a two day scenario. Enter the following data for Day 1. The weather is Clear (0), the North is Offensive (1) and the South is Offensive (1), 1pm to 5pm are day (3), move (1) turns, 6 and 7pm are dusk (2), move (1) turn, 8and 9pm are night (0), move (1) turns. Enter the following data for Day 2. The weather is Clear (0), the North is Offensive (1) and the South is Offensive (1), 3am is a night (0), move (1) turn, 4am is a dawn (1), move (1) turn, 5am to 5pm are day (3), move (1) turns, 6 and 7pm are dusk (2), move (1) turn, 8pm is a night (0), move (1) turn and 9pm is a night (0), end (2) turn. Finally, save again and the scenario is ready to play.

NOTES FOR IBM USERS

IBM users with CGA, MCGA, Tandy or Hercules graphics can create the scenario using the advice given above. There is a minor change in the weapons data base. You do not have to set limits for weapons. There is space for 31 weapons of each type.

IBM users with EGA or VGA cards must first create the game map with the "full-map" graphics disabled. To do this, run the program as DB2 f (or DB3 f or DB1 f) which will by-pass the "full-map" graphics. Select a scenario as a template as explained above and save it in a save-game location. Build up the map in the usual way and save when finished. The rest of the data for the scenario may be entered with the "full-map" graphics either disabled or enabled. There is a full explanation of "Full Map" graphics in Issue 14.

Re-boot the program (this time with the "full-map" graphics enabled) and use the "full-map" WarPaint™ tool to build up the map. In other words, the "full-map" graphics are only graphic images and do not affect the play of the game.

A NOTE ON .LBM FILES

The .lbm files contain the graphic images. DPaint2™ from Electronic Arts can be used to manipulate the file. Up to 250 hexes can be created but DPaint2™ must be used to change the size of the .lbm file. To do this, use the 'Page Size' function to alter the height of the file.

The Decisive Battles program reads the size of the .lbm file on loading and adjusts the WarPaint™ values automatically. If you don't want to worry about manipulating .lbm files, choose a scenario with a 250-hex .lbm file as the template to build the new scenario on.

When saving an .lbm file, a temporary file is created first. When the temporary file is successfully saved the origi-

nal is deleted and the temporary file renamed. This means there must be enough space on the current disk to hold the temporary file.

Macintosh users will find no such complications when it comes to creating scenarios. Follow the directions given in the design section of any *Decisive Battles* game manual.

PLAYER'S NOTES

Anglo-Egyptian

You have two objectives, to crush the Mahdist army and to capture Omdurman. If you fail to achieve either one you will lose and to a certain extent your two objectives are at crossed purposes. The harder you push south the more your army will string out and the more vulnerable individual units will be to being surrounded and destroyed. Don't move south and you will fail to capture your objectives. Good luck juggling.

Mahdist

Unlike Kitchener you have only one aim, to inflict casualties. Whatever you do you will lose masses of men and be driven back so combine a delaying action in the south with heavy attacks on any enemy units which become isolated. If you can draw the Anglo-Egyptian army away from the Nile and their gunboats then you will have a better chance of victory. ◆

THE DESERT GENERALS

Continued from p. 3

Auchinleck suggested that the armour be concentrated and placed further back but he was ignored. A move around the southern flank was precisely what Rommel intended.

On May 26 1942 Rommel attacked. All through the first day, despite reports to the contrary, Ritchie was adamant that Rommel would attack frontally rather than around the open flank. It was only on the 27th after two motorised brigades had been scattered by the German advance that Ritchie admitted his mistake.

4th Armoured Brigade was the first to be hit by the Germans and it was crushed. 22nd Brigade was next, at least it got some warning and put up a reasonable fight. It was only the new Grant tanks of 1st Armoured Division which stopped the Germans.

The results of the day's fighting showed clearly how the British could have beaten Rommel had they been concentrated. The difference between the two commanders on May 28 was dramatic. While Rommel personally led a supply column through British lines to his fuel starved tanks Ritchie muddled around like an old woman, achieving nothing.

Rommel was allowed to open supply routes through the British minefields and reduce the box containing 150th Brigade. The British line was now split and the armour had been mauled.

Rommel set about reducing the Bir Hacheim box at his leisure while his armour occupied a position at the edge of the British minefields which became known as "the cauldron".

Finally after eight days Ritchie decided to attack the Germans in the Cauldron and in one of the most uncoordinated series of attacks of the war the British were driven off, losing 218 tanks. Throughout this debacle Ritchie was sending optimistic messages to Auchinleck. On 11 June Bir Hacheim fell. Rommel controlled the whole southern end of the Gazala line.

The British had used the time required for Rommel to reduce Bir Hacheim to bring up replacement tanks. Once again their armour outnumbered that of the Germans and once again it was destroyed piecemeal, this time during two days of savage fighting. At about this time Ritchie began to lose his complacent optimism. All of a sudden Auchinleck was presented with the true situation and was asked for help. He responded by forbidding Ritchie to retreat to the Egyptian frontier and ordered him to form a defensive line south from Tobruk. Ritchie's subordinates were rattled and wanted to retreat, leaving Tobruk isolated. The Eighth Army commander's solution was to please everyone, by retreating and by lying about it to Auchinleck.

Tobruk was left to it's own devices, Churchill had forbidden it's evacuation and Rommel first threw a ring around the port before breaking through the defences and capturing the entire garrison on June 20-21.

By June 24 Rommel was at Sidi Barrani and Commonwealth losses since the start of the Gazala battles reached eighty thousand. With what remained of his army Ritchie turned to face the Germans at Mersa Matruh, making use of O'Connor's old positions. His deployment was highly unconventional, 10th Corps occupied Mersa Matruh and the surrounding defences, backing onto the sea. 13th Corps deployed along the escarpment facing north. A large gap existed between the two wings.

What Ritchie hoped to achieve through this odd deployment will never be known. On June 25 1942 Auchinleck arrived at Eighth Army Headquarters and relieved Ritchie, taking direct command himself.

Field Marshal Sir Claude Auchinleck was commander in chief of Commonwealth forces in the middle east. He was responsible for such diverse areas as Ethiopia, Palestine, Iraq and Persia. It was a huge area and a huge responsibility. It is therefore to Auchinleck's great credit that he not only was prepared to directly command the Eighth Army in the Western Desert but that he commanded it extremely competently at the same time as he was dealing with matters across the rest of the middle east.

When Ritchie proposed to risk all in a final battle at Mersa Matruh Auchinleck could not sit idly by. To go down fighting in a heroic last stand may have been terribly British but it would have spelled disaster for the Allied war effort. Egypt would have fallen, laying open the whole of the middle east to German

conquest. The oil fields, the Caucasus and even India would all have been within striking distance of a reinforced Panzer Armee Afrika.

Auchinleck's first decision was that the Eighth Army must be preserved at all costs. Mersa Matruh and behind it El Alamein could be given up if it meant that the Army would live to fight another day.

Having admitted his willingness to give up ground Auchinleck was determined to make Rommel fight for every successive position. As soon as he reached the front the new commander began looking at how and where he could counterattack Rommel.

In the space of a few days the mood in the Army went from the fatalism of a last stand to a plucky sense of opportunism. Orders to stand and die were countermanded in favour of a resolve to retain mobility and not allow any part of the Army to be cut off.

The Eighth Army, however, did not have those few days to allow an infusion of leadership and confidence to take effect. On the morning of June 26, less than 24 hours after Auchinleck had taken command Rommel attacked.

The Germans entered the gap between the two British Corps, moving tentatively due to their faulty intelligence. 13th Corps was ordered to attack the German flank but remained stationary.

The British had been reinforced since Gazala and now had 150 tanks to Rommel's 60 but they lacked any sort of confidence. The southern flank of the British force meekly withdrew leaving 10th Corps in danger of destruction. A breakout was ordered and despite near fatal delays, was carried out. Another 6000 British prisoners fell into the hands of the Germans.

As the Army retreated to new positions at El Alamein Auchinleck witnessed some of the inefficiencies that had crept into the organisation. His mood darkened but with it came a resolve to put the fight back into his soldiers and beat Rommel. The German commander had heard BBC broadcasts describing the (nonexistent) Alamein Line and rather than bulling ahead he paused and gave Auchinleck a couple of days in which to regain his footing. Divisions which had proved too cumbersome in mobile desert warfare were broken down into brigade groups of all arms which proved far more manoeuvrable.

Rommel attacked on July 1 on both sides of Ruweisat Ridge. Auchinleck had foreseen a manoeuvre of this kind and the Germans ran into stiff opposition. The Afrika Korps attacking south of the Ridge was stopped by entrenched infantry while 90th Light Division, between Ruweisat Ridge and El Alamein encountered a combination of mobile brigade groups and massed artillery under Auchinleck's personal control.

By the end of the day Auchinleck had achieved something that Ritchie had been consistently unable to, he had wrested the initiative back from Rommel. But despite the Germans coming to a standstill Auchinleck was still unable to launch an effective counterattack due to the miserable state of command and control throughout most of the Army.

Rommel was allowed to shift the Afrika Korps north to join 90th Light and a planned flank attack from the British armour turned into a costly frontal assault. On July 3 the Germans attacked again and made a deep penetration around the flank of the El Alamein defences. Although the enemy appeared on the verge of breakthrough Auchinleck was able to shift reserves from the south and prevent any rupture of the British lines.

In a desperate gesture Rommel threw the mobile elements of the Italian Army into the fight. Held frontally by New Zealand Infantry and struck in the flank by 1st Armoured Division the Italians collapsed. That night Rommel went over to the defensive.

Eighth Army might have been able to fight a competent defensive battle under good leadership but the events of the previous month rendered the bulk

Auchinleck

of the Army useless for offensive operations. Auchinleck planned a major counterattack for July 5, intending to swing around Rommel's southern flank and pocket the Germans against the sea.

Many units simply refused to attack, leaving those who did in a less than favourable situation. Only one fresh armoured car unit attacked with any vigour and managed to break clean through the German defences. It was an indication of what was possible given decent morale.

Rommel was able to recover and as his Italian infantry came up it replaced the mobile formations in the line. Auchinleck realised that if the Germans were given half a chance to recover, Rommel might be able to regain the initiative. Therefore he hit upon a plan to attack the weak points of the Italian line and thereby force Rommel to commit his Germans to plug the gaps.

The first attack was delivered with the fresh 9th Australian Division along the coast. The Sabratha Division collapsed, losing all it's heavy equipment and the breakthrough was only sealed off by the intervention of 15th Panzer Division.

Auchinleck gathered himself and struck again, this time inflicting heavy casualties on the Trieste Division.

The British commander then waited while Rommel gathered his Panzer Divisions together for a renewed attack in the centre. Just as this was about to be unleashed the Australians attacked again, breaking the Italian line and threatening to roll up that portion of the Axis forces north of the German concentration.

Rommel was again forced to use his Germans to prevent a disaster. He began to contemplate a retreat. The victors of Gazala and Mersa Matruh were now in danger of total defeat. In less than one month the relative positions in the desert war had been reversed. Although nobody yet realised it Rommel and Panzer Armee Afrika were a spent force.

The change in fortune was down to one man, Field Marshal Sir Claude Auchinleck. For the second time he had stepped into a losing situation and defeated Rommel.

Auchinleck now wanted to build up his forces and take the opportunity to reorganise the Army. Churchill did not allow any time at all. With the Germans entering the Caucasus there was a need to form a defensive line in northern Iraq and in order to free up manpower Churchill demanded that Auchinleck attack Rommel immediately.

The offensive launched on July 21 was a dismal failure. 23rd Armoured Brigade fresh from England displayed absolutely no tactical skill and charged as if they were cavalry. 86 tanks were lost. The battle was resumed on July 26. After a promising start the failure of 2nd Armoured Brigade to exploit an infantry breakthrough resulted in heavy infantry casualties. Both sides had already lost heavily and Auchinleck refused to be drawn into an attritional battle. The attacks were called off.

A resumption of the offensive was thought possible in mid-September at the earliest. Two new armoured divisions were being shipped from England and these were to be equipped with Grants and Shermans. Another two infantry divisions were also on their way and for the first time Eighth Army was to receive self propelled artillery. The next attack would be made with a material superiority undreamt of in the early part of the desert war.

On August 3 Churchill arrived in Cairo and, after several days sacked Auchinleck in favour of Alexander. Gott, who had completely lost his nerve and had performed badly in the recent battles was offered the comand of Eighth Army. Luckily perhaps for the British Gott was shot down by a German plane on a routine flight and killed. Eighth Army was then offered to Montgomery. Auchinleck was offered command in Iraq and Persia which had been split of from Alexander's sphere of influence. He refused.

Auchinleck was not to step down until the middle of August and there followed an uneasy period during which the incoming and outgoing commanders were in close proximity. Montgomery was made aware of Eighth Army's defensive dispositions and of Auchinleck's prediction that Rommel would attack in the Alam Halfa area. Knowing as he did of the existing plans for dogged defence it seems incomprehensible that Montgomery should claim in his memoirs that Auchinleck planned to retreat from El Alamein if attacked. Later editions of the memoirs were forced to print a retraction of this passage.

The final word on Auchinleck's time as Eighth Army commander should be given to Fritz Bayerlein, Rommel's chief of staff, "If Auckinleck had not been the man he was - and by that I mean the best Allied general in North Africa during the war - Rommel would have finished the Eighth Army off."

The new commander, Montgomery had not commanded troops in the field since Dunkirk. The only operation with which he had been associated was Dieppe. Montgomery was responsible for the initial planning of the disastrous raid. His plan had no subtlety being a straight forward armoured assault on the town. This assault was blown into oblivion.

When Monty arrived in the desert he immediately took over Auchinleck's Alem Halfa plan as his own. Churchill, who had been angry when Auchinleck claimed an attack was impossible before the middle of September cooly accepted Montgomery's assertion that no attack could be launched before the end of that month.

When Rommel's attack came it was the desperate last throw of a beaten man. The British outnumbered the Germans by nearly four to one in tanks and had complete air supremacy. During the night of August 30 the German mobile divisions began moving. The next day they swung north, right into the British trap.

For two days the Germans attacked and each time they were beaten off. On September 2, almost out of petrol the three shattered German Divisions began to retreat. It would have been simplicity to have placed a fresh British armoured brigade across the path of retreat but Montgomery had not allowed for such an opportunity in his plans and refused to make use of it. On the night of September 3 the New Zealand Division attacked the retreating Rommel but it was too little too late.

The battle had run almost exactly how Auchinleck had predicted it would. Despite the lost opportunities Alem Halfa, the one battle fought by Montgomery which had been planned by another man was considered by many to be his finest.

Planning now got under way for the second battle of El Alamein. It was to be launched 13 days prior to the "Torch" landings in north west Africa. Montgomery predicted that the Alamein battle would take 12 days and therefore in his timing he was insuring himself against defeat.

If Rommel won he would not be able to pursue the Eighth Army, there being a large force in his rear. Given that this was so Barnett makes the sound point that Rommel would have been forced

to retreat into Tunisia regardless of whether Montgomery attacked him. Second Alamein was therefore fought in order to gain a prestige victory, not to win the war in North Africa.

The Germans were outnumbered by more than two to one in tanks and men and the British had almost complete control of the air. Rommel's defensive line was weakly held by contemporary standards and was quite shallow, allowing British artillery to blanket the entire defensive system. Rommel was sick in Germany and the German mobile reserve did not have enough fuel to move from one end of the line to the other.

The British had won Crusader against greater odds, with worse equipment, air parity and a commander on the verge of a nervous breakdown. Surely Alamein would be a walkover?

On October 23 1942 the battle of El Alamein commenced. 70 000 men with 600 tanks attacked a small part of the Axis line occupied by the Italian Trento Division. The British infantry and armour had been split into two separate Corps. These were deployed with the infantry of XXX Corps in the front to achieve the breakthrough while the tanks of X Corps were behind to follow up.

This faulty organisation resulted in chaos. The infantry of XXX Corps became bogged down and due to lack of inter-corps communication the tanks of X Corps blundered into the rear of XXX Corps with no room to manoeuvre. The Germans were presented with an excellent artillery target.

Had Montgomery had the foresight to combine infantry and armour in each corps and had the two corps attacking side by side each of the two attacks would have been far easier to coordinate than was the case.

Faced with a crisis Montgomery's solution was to attack through uncleared minefields with his armour. After strong argument from Gatehouse, the commander of 10th Armoured Division only one battalion made the attack. It was shot to pieces. With the British floundering about in the German minefields the Germans were having their own problems. General Stumme, Rommel's replacement had died of a heart attack and until Rommel could return General von Thoma was in command.

Montgomery

The situation was perfect for a counterattack but this was not carried out until October 27 after Rommel had arrived. The Eighth Army had been almost stationary for two days and had been allowed time to bring up it's anti-tank guns. Rommel's counterattack was beaten off with help from the Royal Air Force.

Finally on October 29, armed with a new plan Montgomery attacked again. The Australians attacked along the coast road meeting with some success. When it was learned that 90th Light Division was behind the 164th Division Montgomery became edgy and changed his plans again.

The final plan for the battle was suspiciously like the first. On the night of

November 1/2 an attack was launched by XXX and X Corps with 800 tanks. By Dawn on the 2nd the breakthrough was finally achieved. Even now the British could not deliver the final death stroke to Rommel. The remaining 90 tanks of the Afrika Korps fought a brilliant action against the 700 tanks of Montgomery.

No forward movement was made by the British on November 2 or 3. The German defence was giving Rommel time to pull out his static divisions and it was only Hitler's order which prevented them from getting clean away. The Germans remained stationary for 36 hours but still got away. By the time Montgomery launched his pursuit the Germans had a full day's start!

X Corps, which was supposed to have been the spearhead of the pursuit was so battered that it had to be reformed and an infantry division included in it. In order to give an appearance of full strength divisions 44th Division was cannibalised, it's brigades being split between the 1st and 10th Armoured Divisions.

Once the pursuit got under way Montgomery was urged to make a long march with X Corps, maybe as far as Tobruk, placing it across the German line of retreat as O'Connor had done to the Italians at Beda Fomm. The British Commander preferred to make short marches, regularly swinging north to the coast.

Four times the British tried to trap the Germans against the coast before the retreat had passed Mersa Matruh and four times the Germans had gone before the pursuers arrived. On November 6 it rained, turning normally good going into a quagmire. This gave Montgomery a convenient exscuse for allowing Rommel to escape as if the German retreat was unnaffected by the bad roads.

Montgomery had total knowledge of Rommel's strength and supply situation from ULTRA. The Germans were reduced to ten tanks and even these were periodically halted while fuel was delivered from the rear. Nevertheless the British commander refused to launch his two X Corps armoured divisions into a hell for leather pursuit. As if Rommel could cause a disaster with ten tanks.

Tobruk fell on November 13 and Barnett makes the significant comparison that it took the British 11 days to cover this distance, in comparison with Rommel's nine after Gazala. In Rommel's case, however, he had to fight a battle at Mersa Matruh between Tobruk and El Alamein!

Having reached the Cyrenaicean bulge Montgomery was urged to repeat O'Connor's thrust to Beda Fomm. He refused, implying that it would place him in a weak position and open to a counterthrust.

The pursuit coninued, Rommel was reinforced and now had a force of 30 tanks and 40 88s. It was still a pitifully small force but in view of the incredible caution which Montgomery had displayed over the past few weeks Rommel resolved to defend El Agheila.

The bluff paid off, Montgomery deployed and for three weeks he sat in front of the German positions preparing a set-piece attack! On the night of December 7/8 the Italian divisions abandoned Rommel but still the British refused to move. Five nights later Rommel slipped away, just as Montgomery's offensive opened.

The great scheme that had taken three weeks of careful thought, a frontal assault by armour while the New Zealand infantry worked their way around the German flank. It was exactly the same plan as Montgomery had come up with for Dieppe months before.

For once the pursuit was reasonably vigorous, the Shermans of 7th Armoured Division caught the Afrika Korps who were forced to turn and fight. While the mellee was in progress the New Zealanders got around the German flank and blocked the coast road. Montgomery announced to the world that he had trapped the Germans who promptly broke through the New Zealand cordon and escaped.

Again Rommel halted, short of Tripoli. Again Montgomery waited an eternity before attacking and again the Germans escaped with ease. Tripoli fell on January 23, exactly three months after the opening of 2nd Alamein. Two years to the day after Rommel had landed in Africa the last German soldier retreated across the border into Tunisia. In Barnett's words "The desert war was over".

So, in closing, the five men who commanded Britain's desert army? Cunningham and Ritchie are the easiest to deal with. They were not up to commanding an army against one of the best commanders of mobile troops in the war. They tried their best and they lost.

O'Connor fought one campaign and won every battle he fought. However, he said himself "I would never consider a commander completely successful until he had restored the situation after a serious defeat and a long retreat." O'Connor never got a chance to completely prove himself but what we did see of him was all good. He was a promising general who was not allowed to demonstrate his full potential.

Auchinleck was the one commander in the desert of whom O'Connor's statement holds true. Twice Auchinleck stepped in to prop up failing subordinates, both times turning defeat into victory, the second time after a "serious defeat and a long retreat".

Auchinleck defeated Rommel's last major effort to reach the Nile and as such he won the desert war. He did so under the most difficult conditions making him the only man to beat Rommel without a huge numerical superiority. The Germans recognised Auchinleck as the best general they faced, it is a great pity that more people on our side didn't see the same thing.

Montgomery; Barnett refers to him as a "Military Messiah" and no doubt that is how he was viewed by many. Neatly covering up the fact that the war in the desert had been won when Auchinleck stopped Rommel at El Alamein

Montgomery and his supporters have presented a picture of unbroken defeats before Montgomery's arrival and unbroken victories afterwards. The only surprising fact about Alamein is how close Montgomery came to losing. Once he had won he allowed Rommel to escape time and time again when the German general was in a hopeless position. If Montgomery won a great victory it was in the perception of the British people most of whom still regard him as one of, if not the greatest general of World War II.

The Desert Generals was first published in 1960. The current edition is part of the Pan Grand Strategy series and was published by Pan Books of London in 1983. ◆

LETTERS
Continued from p. 4

base and it would also be a great educational tool.

I do not know how original this idea is - it could be that you have thought of this yourselves, but found that it would be very difficult to research. However, you could always interpolate between those points in time where you are confident of the OBs. Another thing is that I have no idea what the manoeuvre units are in your game, but I definitely would like to see divisional units represented in some way. Anyway, I look forward to hearing from you on this subject.

Keep up the good work and happy wargaming!

Kind regards

Paul Nidras

St Albans

Victoria, Australia

Ed. I hope you like *The Last Blitzkrieg* Paul. We already have a replay option in the game though, at present, it only replays the game you are currently playing. Let us think about whether we could use this feature to replay the battle as it actually was. We also hope you appreciate the way we have dealt with divisions and divisional integrity in the game. Using the actual divisional insignia has resulted in the best looking unit symbols of any WWII game currently available.

❖ ❖ ❖

Dear Sirs,

Well I took my time, but I've finally renewed my subscription to your fine magazine. I also thought that I would take a moment to write a note of congratulations for your wonderful products. The *Decisive Battles Game System* is by far my favourite, and I greatly enjoy creating my own scenarios. Although not perfect, the system works reasonably well to recreate Napoleonic and English Civil War battles. I must, however, add my name to the list of people who have asked (or is that pleaded?) for a new system that was specifically designed for those of us who have an intense fondness for the Napoleonic era. As well I admit a far greater interest for 19th century battles of Europe to those of the American Civil War. Could we see more of these scenarios in RUN 5?

Regardless of my many wishes I once again thank you for producing a host of excellent games, and for RUN 5 which works to increase the value of your games.

Sincerely,

K. Todd Wilson

Golden, B. C.

Canada

Ed. Every so often Todd we get a request such as yours for a Napoleonic variant of DBACW. Unfortunately, for us to do justice to the Emperor we would have to design the system from scratch and that would take a lot of time. Therefore it is almost certain that if we decide to do a Napoleonic game it will be as a spin off from a new American Civil War game system. Our largest market is in America and the Americans are, understandably, more interested in their own war than in Napoleon. What you can be sure of is the interest here at SSG where one N. Bonaparte is held in very high esteem indeed.

By the way, send us your scenarios. If we like them we may publish them in Run 5.

❖ ❖ ❖

Dear SSG:

Please, please, please do another Reach For The Stars soon. VERY soon. RFTS was a fine game and has yet to be equalled with respect to AI. In the intervening years I have wasted several hundred dollars buying almost every IBM compatible space exploration/empire building game that has hit the market. Some were pretty good, better than RFTS in a few respects (i.e. nifty features), but poor AI has doomed them all. I know, from my many years with your products, that you guys CAN do what no one else has been willing to do: write the definitive, state-of-the-art RFTS variant.

Features you need:

1. Multiple players at the same computer or solo.

2. Control of ship design.

3. Complex economies with an automatic distribution feature. (deep econometric model, but don't make me micromanage the logistics.)

4. Extensive research and development features. They do not need to yield the same results from game to game or from player to player.

5. Your current mix of star and planet types (or more)

Continued on p.48

Snippets of Military History

by Stephen Hand

Engaging the Germans

Most students of military history recognise that the bulk of the German army during the First World War was engaged by the French and the British on the Western Front and during the Second World War by the Soviets on the Eastern Front. However, most of those same students have no idea of the huge difference between the British contribution in the two wars.

In order to highlight this difference some figures are given from both wars. In all cases the number of German divisions engaged is compared with the total number then engaged on all fronts.

First World War

Battle	German Divisions Engaged	German Total
The Somme, July - Nov. 1916	95.5	175 (125 in West)
Arras, Messines and Third Ypres April - Nov. 1917	131	256 (137 in West)
German Offensives, March - April 1918	109	248 (192 in West)
Final Offensive, Aug. - Nov. 1918	99	235 (197 in West)

Second World War

Battle	German Divisions Engaged	German Total
Dunkirk, May - June 1940	16	137 (in West)
El Alamein, Oct. - Nov. 1942	4	200
North Africa, Nov. 1942 - May 1943	9	171
Normandy and Italy, July 1944	18	315
Germany and Italy, Feb. 1945	14	325

As can be seen the British never engaged more than 18 German divisions at any one time during World War II. As a percentage of the total German numbers the British fought 11.7%of all German divisions during the 1940 campaign and by wars end were only engaging 4.3% of German divisions.

In comparison with these figures the British contribution to the First World War was far greater. On the Somme the British engaged 54.6% of all German divisions and this had only fallen to 42.1% by the end of the war.

The greatest contribution of the British came in the battles of 1917 when, between April and November of that year all but six German divisions on the Western Front were engaged. German units were constantly rotated during this period with those divisions not facing the British able to recuperate opposite the battered French armies.

Before the Somme the British contribution to the Allied war effort had been of the same order as in World War II. With the Somme the British showed a willingness, for the first and last time in their history to engage a continental power on equal terms rather than as the junior partner in a coalition.

The cost of fighting a war on a continental scale has filled subsequent generations of Britons with a horror of the Western Front. Because of the uniqueness in British history of the Western Front the British people have never come to terms with the reality of warfare in the industrial age. They see World War I as an aberration and, as such they fail to see their true place, as a minor player, in World War II.

Von Manstein and the maker of Cointreau

Generalfeldmarschal Erich von Manstein was one of the greatest military minds of World War II. His achievements in saving the southern wing of the German Army in Russia from disaster were the subject of discussion in the last issue. If any man could have won the Russian campaign it was von Manstein. Thankfully for the rest of the world Hitler's paranoia stripped Germany of one of its most gifted soldiers andthe rest, as they say, is history.

At the start of the war von Manstein was neither a field Marshal nor one of Germany's most prominent commanders. During the Polish Campaign he was chief-of-Staff to Generaloberst von Rundstedt, commanding the southern wing of the attack.

After Poland von Rundstedt and von Manstein moved to the border with France where the former took up command of Heeresgruppe A. They were to play a secondary role in the invasion of France, that is until von Manstein succeeded in convincing first von Rundstedt and then Hitler to acept his alternative.

von Manstein's plan is well known to students of the French campaign, the lightning strike of Heeresgruppe A through the Ardennes resulted in the BEF and a large proportion of French units being pocketed against the channel coast.

Meanwhile von Manstein had made enemies amongst the General staff in his attempt to have his plan accepted. He was quietly kicked upstairs to command 38th Corps, playing a minor role in the invasion.

By the time France had fallen von Manstein's Corps was south of Angers in the Loire Valley. After the surrender the corps was assigned to handle the conversion of a number of infantry divisions to panzer or motorised formations.

von Manstein's headquarters was shifted from the magnificent castle of Serrant near Chalonnes to a chateau on the middle Loire, previously owned by the manufacturer of the liqueur Cointreau. The general was appalled by the building which, far from being ancient had been built by its owner to resemble "an ancient stronghold". As von Manstein goes on to say, it "had all the hallmarks of bad taste usually found in imitations of this kind. The effect was not improved by a tower near the living-premises that had actually been built to look like a ruin. Nor did the little cannons along the terrace bear as much resemblance to war trophies as their owner the liqueur manufacturer, might have hoped."

Just in case anyone was left in any doubt as to the apalling taste of the Cointreau manufacturer there was a prominently displayed painting of the monarchs of Europe at the turn of the centur. The painting included the Kaiser and Queen Victoria seated at a table. "Unfortunately they all looked as if they had taken more Cointreau than was good for them. On his feet beside the table was the owner himself, triumphantly brandishing a glass of his own liqueur." In a rare display of emotion the same man who could coldly describe the deaths of thousands on the Eastern Front had the last word. "The removal of this monstrosity was the one change we made in that 'chateau'."

❖ ❖ ❖

Air Marshal Arthur 'Bomber' Harris presided over some of the most morally questionable activities of the Second World War. The firebombing of Dresden, previously untouched because it contained no military targets did not and could not serve to shorten the war in Europe. As such it was not merely regrettable but falls into the category of a war crime.

Harris, it seems had a casual attitude towards the civilian casualties he was responsible for and this attitude can be no better displayed than by an incident between Harris and a policeman late one night.

Harris owned a Bentley which he was in the habit of driving far too fast. One night he was stopped on the road from the Air Ministry by a motorcycle policeman. "You might have killed somebody, sir" said the policeman to which Harris replied "Young man, I kill thousands of people every night!"

❖ ❖ ❖

The quest for light body armour has seen a range of fabric and leather alternatives to plate steel. Padded garments of some variety have been worn under steel armour throughout its history. The more rigid the armour the less thick the padding had to be such that the cavalry cuirass of the 18th and 19th centuries was rarely worn over more than a thick woollen uniform.

The leather 'buff-coat of the seventeenth and early eighteenth centuries provided an efficient alternative to steel. It was almost as effective against a sword cut as a breastplate and was more effective against bullets, not splintering into shrapnel on impact.

Perhaps the most odd variety of soft armour was the silk armour of the late 17th Century. Claiming to be bullet proof (which is entirely possible given the ability of silk to resist puncture)the armour consisted of thick padding covered with a layer of pink silk.

Whether or not the armour worked is unclear but several writers speak of the way in which the wearer resembled an armoured pig.

Roger North in his Examen went one step further when he stated that a man in silk armour was "as safe as in a house, for it was impossible anyone could go to strike at him for laughing."

❖ ❖ ❖

The British government has never been averse to saving a penny at the expense of the life of a soldier. Examples of incompetence abound.Here are two which date from the Omdurman campaign, discussed in a separate article.

Firstly the boots worn by the British soldiers proved unequal to the conditions. While fine on soft going the boots wore out rapidly whenever the soldiers marched across stony ground.

Typically the government ducked the question stating that the boots were absolutely fine, only wearing out when they were misused. Apparently the soldiers should have kept to the sealed roads.

The other equipment scandal was the standard of the swords issued in the campaign. An officer of the 21st Laneers thrust at a dervish and had his sword bend double. Captain A.K. Wilson had the opposite problem, his sword being too brittle rather than too soft. "I had a cool prod at him." he stated "He seemed beastly hard and my sword broke against his ribs."

Marshal of France, Michel Ney was a man who could become paralysed by the neccessity of making a decision but who rose to the occasion as no other when the chips were down. During the retreat from Moscow Ney commanded the rear guard. When warned of the approach of some cossacks Ney gestured to some veterans and replied "With men like that, I don't give a fig for all the cossacks in Russia."

As he approached the River Niemen, the border with Prussia his rearguard consisted mainly of Germans. Attacked by cossacks the Germans threw down their weapons and ran. Ney picked up their muskets one by one and fired at the advancing horsemen. He shouldered the last musket and calmly walked unmolested across the bridge. On December 15 Ney marched into an occupied town alone. When asked who he was he replied "Don't you recognise me?, I'm Michel Ney! I'm the rearguard. Have you any soup? I'm damned hungry!" ◆

LETTERS
Continued from p. 45

6. Multiple planets at each star (possibility thereof)

7. Random map generation.

8. Different alien racial tendencies

9. Your Socio/environmental model is fine (vary for different races?)

10. Control over inclusion of random events (asteroids, earthquakes, plague, etc.)

11. Espionage

12. Tactical combat - leave it out. This is a minor game in itself. If you can do it right, then O.K. Otherwise just make a kick-ass strategic/operational level game with a detailed report on the fleet actions. I am torn on this one.

14. A smooth point-and-click mouse interface.

15. The ability to toggle on/off the colouration of all star systems I control. (my stars are green on the star map, etc.)

16. Vicious, clever AI.

17. Trade/diplomacy (Optional; exclude if it hinders a good AI)

18. Game in turns, NOT real-time.

19. Do not get carried away with a lot of bells and whistles in sound and graphic features.

20. Keep a simple command structure.

21. THREE DIMENSIONAL SPACE. The big thing about a space game is that it is in SPACE. It is a THREE dimensional environment. There should be no boundaries in any direction. Let us study and experience the requirements and opportunities of operating in three dimensions. (Is Asimov's "englobement" a valid strategy?). No one has addressed this in previous games satisfactorily, in spite of the fact that the three dimensionality of space is its dominant feature.

Look, these type of games sell well. Companies keep turning them out and people keep buying them, year after year. Publish a good game and reap the benefits... and make me happy too. The implementation of #14 and #21 alone would yield a remarkable game.

Thank You,

Deen Wood

Spring, Texas

USA

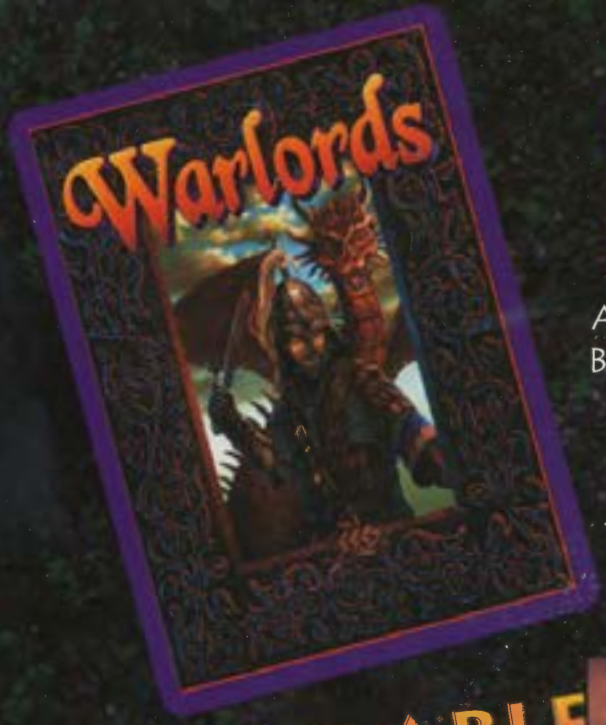
Ed. You do make a good case Deen and we have thought of doing a modern version of *RFTS*. It is one of my favourite SSG games and we could certainly improve it out of sight with a ground up rewrite. Don't hold your breath, even if we decide to do *RFTS* after we complete *The Last Blitzkrieg* it will take us quite a while to do a job we will be really pleased with.

EDITOR'S CHANCE
Continued from p. 3

ton before the arrival of either Blucher or night.

The central portion of the Eastern Front in World War 2 was relatively quiet between the Soviet counterattacks launched during the winter of 1941-2 and the participation of Model's Ninth Armee in the abortive attack on the Kursk salient. However, relatively quiet in Eastern Front terms was far from a rest camp. The actions of Model and his Ninth Armee between Moscow and Kursk are examined in Issue #25.

The book to be reviewed will probably be Geoffrey Parker's classic *The Military Revolution* which discusses the military advances which allowed the west to become the dominant force in the world between 1500 and 1700.



WARLORDS
THE TRADING CARD GAME

A GREAT COMPUTER GAME IS ABOUT TO BECOME A GREAT TRADING CARD GAME!

2-8 PLAYERS, EACH USING THEIR OWN DECK · INTRODUCTORY SCENARIO FOR USE WITH YOUR FIRST STARTER DECK · 2 ADVANCED SCENARIOS TO CAPTURE ALL THE FLAVOR OF CAMPAIGNING IN ILLURIA · OVER 250 BEAUTIFULLY ILLUSTRATED CARDS IN THE INITIAL RELEASE

AVAILABLE FOR CHRISTMAS

WARLORDS II DELUXE UPGRADE OFFER

TO QUALIFY FOR THE UPGRADE -

1. SEND IN ANY WARLORDS II OR WARLORDS II SCENARIO BUILDER DISK, OR
2. SEND IN THE FRONT PAGE OF THE WARLORDS II OR WARLORDS II SCENARIO BUILDER RULEBOOK, OR
3. SEND PROOF OF PURCHASE OF WARLORDS II OR WARLORDS II SCENARIO BUILDER, OR
4. BE A REGISTERED OWNER OF WARLORDS II OR WARLORDS II SCENARIO BUILDER.

IF YOU RE NOT SURE YOU QUALIFY FOR THE UPGRADE, JUST CALL.

NORTH AMERICAN CUSTOMERS SHOULD MAKE THEIR UPGRADE PURCHASE FROM OUR US OFFICE. COST IS $USD35.00 PLUS $2 POSTAGE OR $4.50 FOR 2-DAY AIR.

STRATEGIC STUDIES GROUP
P.O. BOX 30085
PENSACOLA, FL. 32503-1085
U.S.A.

PHONE (904) 469-8880
FAX (904) 469-8885

CUSTOMERS ELSEWHERE SHOULD MAKE THEIR UPGRADE PURCHASE FROM OUR AUSTRALIAN OFFICE. COST IS $AUD45.00 PLUS $2 POSTAGE (IN AUSTRALIA) OR $10 (INTERNATIONAL AIR MAIL)

STRATEGIC STUDIES GROUP
P.O. BOX 261
DRUMMOYNE, NSW. 2047
AUSTRALIA

PHONE 61 2 819-7199
FAX 61 2 819-7737

DELUXE Warlords II

SUPPORT FOR NETWORKS (NETBIOS), E-MAIL, MODEM AND NULL-MODEM PLAY · 256 COLOR SVGA GRAPHICS FOR ALL SCENARIOS · OVER 25 NEW SCENARIOS WITH MANY DIFFERENT ARMY AND CITY SETS · IMPROVED COMPUTER ROUTINES · CONVENIENTLY PRESENTED ON CD-ROM · IMPROVEMENTS AND ADDITIONS TO GAME OPTIONS · IMPROVED MOVEMENT SYSTEM AND FASTER GAMEPLAY · MUCH REQUESTED UNDO FUNCTION FOR MOVEMENT · NEW UNDERGROUND SCENARIOS AND TERRAIN TYPES · IMPROVED SCENARIO BUILDER INCLUDED · NEW PAINTING TOOLS FOR SCENARIO BUILDER · NEW SOUNDTRACK

CHECK OUT OUR GREAT UPGRADE OFFER
(ORDER NOW! SEE OVERLEAF)

SRP $USD69.95
(IN NORTH AMERICA)

SRP $AUD89.95
(ELSEWHERE)

THE LAST BLITZKRIEG

THE ARDENNES OFFENSIVE
DEC 1944 - JAN 1945

A NEW OPERATIONAL LAND COMBAT SYSTEM!

MAGNIFICENT 640*480*256 COLOR GRAPHICS • UNPRECENDENTED LEVELS OF MAP DETAIL AND ANIMATION • SIX SCENARIOS, INCLUDING A FULL CAMPAIGN GAME • INTEGRATED MOVE-AND-FIGHT COMBAT SYSTEM • EXTENSIVE ON-SCREEN HELP AND FULL TUTORIAL • DETAILED ORDER OF BATTLE • REPLAY FEATURE FOR RELIVING BATTLES • ORIGINAL SOUNDTRACK • FULL SUPPORT FOR NETWORK, MODEM, NULL-MODEM AND E-MAIL

SRP $USD69.95
(IN NORTH AMERICA)

SRP $AUD89.95
(ELSEWHERE)

AVAILABLE IN SEPTEMBER!